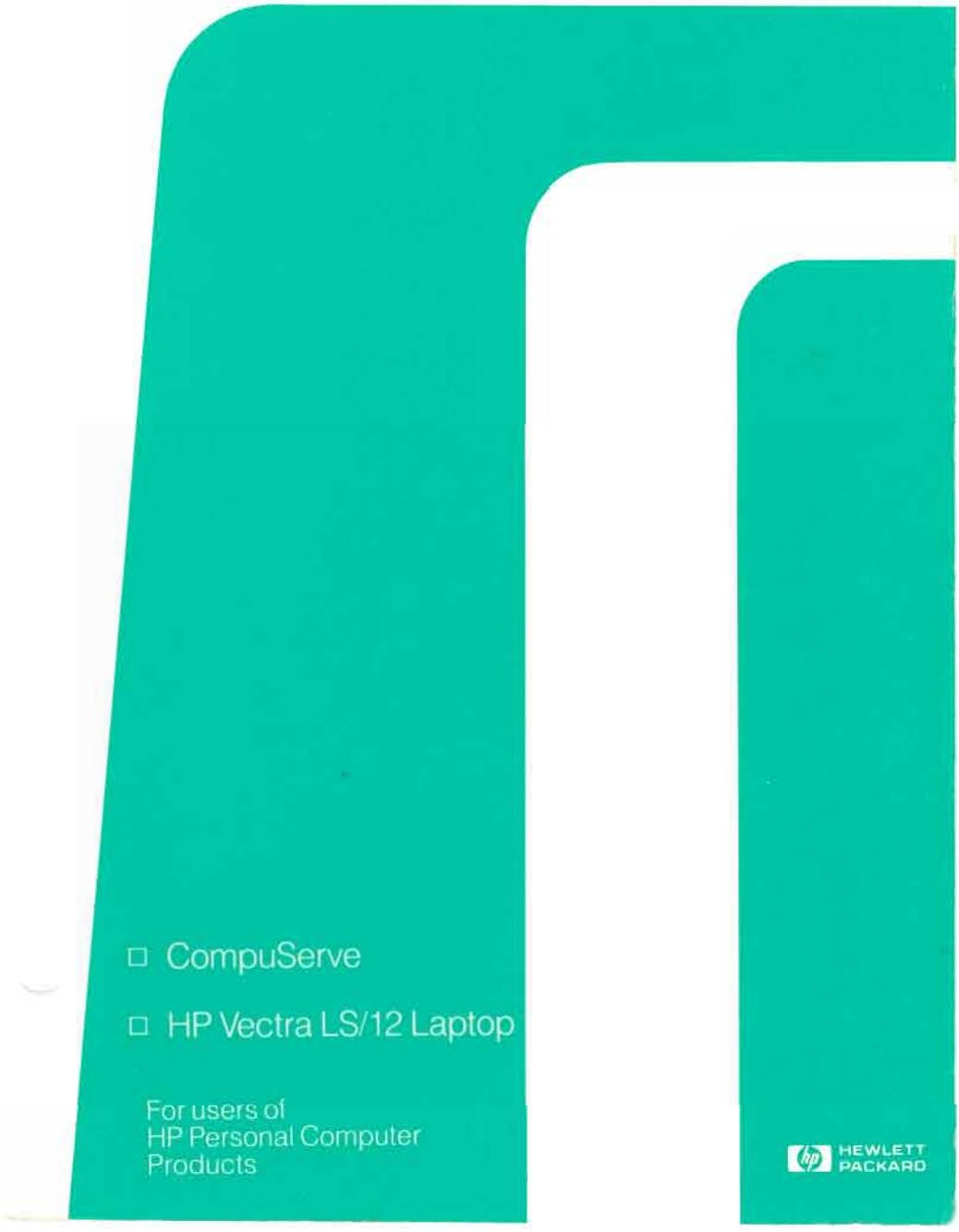
The HP PC Communicator 31

January February 1989



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The HP PC Newsline

Late-breaking news on HP personal computer products

HP's new offering in the laptop computer market, the **HP Vectra LS/12 Laptop PC**, is now available. The LS/12 combines laptop flexibility with desktop power and is ideal for those who demand both performance and portability. For more details, see the article "HP Vectra LS/12 Laptop PC" in this issue.

***

Two new high-end members of the HP Vectra PC family, the **HP Vectra RS/25C** and **RS/20C**, can now be ordered. As replacements for the HP Vectra RS/16 and RS/20 PCs which will be discontinued March 1, 1989, the new products establish higher performance levels for HP's Vectra PC family.

The new, 80386-based Vectra RS PCs offer all the benefits of the award-winning HP Vectra RS/20 PC (PC Magazine "Editor's Choice" June 28, 1988), and are ideal as CAD/CAM stations, hosts for multi-user systems, LAN servers, and for business applications such as very large spreadsheets and databases.

The RS/20C is available in three models and the RS/25C in four. Hard discs are available in 103, 155, and 310 MB capacities. All models come with the main hardware components already installed. For more information, contact your dealer or HP sales representative. *[Watch for articles on the new HP Vectra RS PCs in the next issue of the HP PC Communicator.]*

***

A new version of **Graphics Gallery, C.00.00**, has been released. The Graphics Gallery Collection (HP product number D1711A) provides you with a complete business graphics solution for drawing and charting, plus approximately 600 clip art figures. New features include support for PostScript™ printers, support for the industry-standard CGM format, full color palette support with 136 on-screen colors, many new chart types (including 3-D pie and 3-D bar), and greatly enhanced integration of drawing and charting programs. To order, contact your dealer or HP sales representative.

***

The **HP CD-ROM** (Compact Disc Read Only Memory) drive (HP 50720A) for the HP Vectra PC family can now be ordered. This is the same fully supported drive that comes with the HP LaserROM subscription service, but now you can purchase the drive alone for your other CD-ROM needs, including the HP LaserRX. The HP LaserRX is a PC-based performance management software tool for HP 3000 MPE systems. The HP CD-ROM drive is a half-height, internal drive that slides into one of the flexible drive slots on an HP Vectra PC, and includes all needed device drivers and extensions. For more information, contact your dealer or HP sales representative.

***

A new **Presentations/Letter Gothic Soft Font** for the HP LaserJet family of printers is now available. The product comes in two disc formats, and contains the FontLoad and MakeFont utilities to make managing your soft font files easy and efficient. Contact your dealer or HP sales representative, and order HP 33413DC for 3 1/2-inch discs, and HP 33412DC for 5 1/4-inch discs.

***

As announced in the HP PC Communicator Issue 28, HP is discontinuing the following video products, effective February 1, 1989:

HP 35731D	Monochrome Plus Video Display
HP 35732A	Monochrome Plus Video Adapter
HP 45983A	Enhanced Graphics Adapter
HP 45984A	Multimode Color Adapter

Not being discontinued, as previously announced, are:

HP 35743A/B	EGA Display
HP 45981A	Multimode Video Adapter

***

The Vectra System BIOS Technical Reference Manual (HP 45945-60031) for the HP Vectra ES and RS PCs has been updated with coverage of the **BIOS** for the recently introduced **HP Vectra QS/16**. If you order the complete Vectra System BIOS Technical Reference Manual after January 1, 1989, the update pages are included automatically. Earlier versions of the manual did not include the update.

If you wish to obtain the update for the HP Vectra QS/16 BIOS (78 pages) free of charge, write to Hewlett-Packard PCG, P.O. Box 3486, Sunnyvale, CA 94086 Attention: Technical Marketing. Please specify the HP Vectra QS/16 BIOS Technical Reference Manual Update, HP part number 5959-6796, and give your name and address.

Hardware coverage is provided in the HP Vectra QS Hardware Technical Reference Manual, HP part number D1410-90002. The Service Manual for the HP Vectra QS is HP part number D1410-90001. Both of these manuals can be ordered from HP DIRECT. For the phone number nearest you, check the "How to Order" section in the green pages.

Technical Reference Manuals and Service Manuals for the HP Vectra ES and RS PCs are also available. For part numbers, see "Manuals: HP/150 Touchscreen and HP Vectra PC" in the green pages.

***

Congratulations to HP's Boise Printer Division which recently announced an important milestone in the history of HP LaserJet printers--one million units sold. The Boise Printer Division marked this millionth milestone by donating an original LaserJet printer to the Smithsonian Institution.

***

Effective February 1, 1989, subscriptions prices for the *HP PC Communicator* are: U.S.A. $44.00, Canada and Mexico $52.00, all other countries $64.00 (U.S. currency). We have not increased prices for more than three years. *HP PC Communicator* subscription fees cover only the cost of printing and expediting mailing. For more information on ordering subscriptions, see "Ordering HP PC Communicator Subscriptions" in the green pages.

***

The HP PC Bugline

Latest information about HP PC questions, problems, and solutions

Q: Can **Gallery Collection** files be used in **WordPerfect**?

A: WordPerfect version 5.0 accepts TIFF or PCX graphics files. Gallery version B.03.00 can convert files to these formats. See the "Running the DTP Update" section of your *Setting Up Drawing Gallery and Charting Gallery* booklet for instructions.

***

Q: When I print from **AdvanceWrite Plus**, the Mark-W (typeface change) does not work when printing the page the marks are on. How can I correct this?

A: You must print the document in order for typeface changes to take effect. They will not print if you use Print-Page. If you wish to print only one page, use Print-Document, then specify the page to print on the second print menu.

***

Q: I am using the **HP LaserJet Series II printer** envelope tray with **AdvanceWrite Plus** and have specified the envelope's dimensions in AdvanceWrite. However, I am getting errors on the front panel of the HP LaserJet printer, and the envelopes do not feed. What is the problem?

A: This is a known problem with the LaserJet printer driver in AdvanceWrite Plus version F.02.00 which has been fixed in the next release. You can achieve limited success by setting page dimensions in AdvanceWrite to: Top Margin .25, Bottom Margin 1, Line Spacing 1, Pitch 12 (or appropriate pitch), Paper Length 8.5, Paper Width 11, and Landscape Mode Y. You will still need to press Continue on the LaserJet printer to feed the envelopes from the tray.

***

Q: I am using **HPWord/PC** version A.02.00 with **AdvanceLink** version B.01.00, and the transfer programs PCTO3000 and 3000TOPC do not work. When I choose their PAM labels, I am returned immediately to PAM.

A: This is a known problem with these versions of the software and is due to a change in the AdvLink batch file. You need to create new batch files for the HPWord/PC transfer programs. Your new PCTO3000.BAT file should have one line only:

```
ADVLINK PCTO3000.CMD
```

Similarly, you should create a new 3000TOPC.BAT file with the line:

```
ADVLINK 3000TOPC.CMD
```

These batch files should be in your AdvLink subdirectory.

***

Q: No matter which document I print in **HPWord/PC**, none of the colons print out.

A: You have your Stopcode set to the colon within the software. Run Wordutil from PAM, and when it asks you to select a task, type in **Stopcode**. It gives you a screen of information and shows you what the stopcode is currently set to. You can then reset it to a character that is not frequently used, such as the tilde (~) or the "turtle" (extend character G) if Terminal Configs has Ascii8bits set to Yes.

***

Q: I would like to scan a logo to use in a **Drawing Gallery** picture. Is this possible?

A: At this time there is no conversion from scanned image formats (raster graphics) to Drawing Gallery (vector graphics). Two possible solutions are to use a desktop publishing package such as PageMaker to combine the drawing with the scanned logo, or to create the logo in Gallery.

***

Q: What is the clock speed of the **HP Vectra CS PC**, and can it be put into a slow mode?

A: The clock speed of the Vectra CS is 7.16 MHz. This speed cannot be lowered.

***

Q: When I initialize my **HP Vectra PC** hard disc, how do I specify an interleave factor other than default?

A: If you are in MS-DOS, you need to run SETUP with the /I option for the initialize utility to prompt you for an interleave factor. From the DOS prompt type: **SETUP /I**. When you run the option to initialize, you are prompted for the interleave factor that you want to use. You can also specify the /I option from within SETUP by typing **/I** at the Options Main Menu.

***

Q: How do I configure **Lotus 1-2-3** version 2.01 for the **HP VGA monitor**?

A: Lotus 1-2-3 version 2.01 does not support VGA. If you configure the VGA monitor as an Enhanced Graphics Adapter (EGA), the VGA monitor will emulate EGA automatically.

***

Q: I can print individual cards from **Executive Card Manager** version A.01.08, but when I try to print after constructing a card in Print Cardfile, I get extraneous characters on the page. After I have performed Get Fields and Place Fields during the construction of the card, the Format Line is all R's.

A: You have set your margins incorrectly in the Print Menu. The right margin is actually the offset from the right of the page width. For example, if you have it set to 74, you are offsetting the margin 74 characters from your page width. If you reset the right margin to 0 (or 1 or 2), you will return to a normal format line.

***

Q: In **AdvanceWrite Plus** can a Glossary call in text from a document that is already created?

A: You can place text from an AdvanceWrite Plus document into a Text Glossary file by opening the document and copying the necessary text to the buffer. Then close the document and open the Text Glossary. Create the new entry identifier and bring in the text from the buffer with Do Insert.

***

Q: How can I tell if my **math coprocessor** is installed correctly on my HP Vectra PC?

A: You can verify that your math coprocessor is installed in the following ways:

1. Go into Lotus 1-2-3 and do a /Worksheet/Status. The math coprocessor field should read "present."

2. If you have Norton Utilities, you can run System Information (SI) and check the coprocessor field.

***

Q: I want to print boxes plotted in dots per inch and colored with grey scaling to my **HP LaserJet printer**, and I am using the escape sequences in the *HP LaserJet Printer Technical Reference Manual.* I can print the boxes, color them with grey scaling, and even place them on the page in different vertical positions, but when I try to move them horizontally they always print on the left margin of the paper. What am I doing wrong?

A: You need to place all of the escape sequences necessary for cursor positions, drawing of the box, grey scaling, and the print command on one line. Your editor file is placing a carriage return at the end of the escape sequences before the print command is issued. Therefore you are telling it to move in a horizontal motion, and then the carriage return places the box back at the left margin before the print command is executed.

For instance, the escape sequences to produce a 3-inch by 5-inch box with 50 percent grey scaling on a page one inch from the left margin and two inches from the top margin is as follows:

```
Esc*p300x600YEsc*c1500a900BEsc*c50g2P
```

When the above escape sequence is entered on one line of an editor file and copied to the HP LaserJet printer, a greyed box as described above prints.

You can also refer to your programming manual for ways to suppress the carriage return.

***

Q: How do you create a **RAM disc** through MS-DOS?

A: If you have extended memory installed in your computer, you can create a RAM disc through MS-DOS, by using the VDISK.SYS driver included with your operating system. You should add a command line to your CONFIG.SYS file to specify the VDISK parameters, including the /E parameter, which specifies that you want to create the RAM disc in extended memory. Creating a RAM disc in conventional (base) memory is not recommended. Note that VDISK cannot use expanded memory.

It is important to remember that any data located on a RAM disc will be lost when you turn your computer off. For detailed information on VDISK.SYS and its parameters, refer to your *MS-DOS User's Manual.*

***

Q: How can I put an **HP QuietJet printer** in alternate (Epson) mode?

A: To put the QuietJet printer in alternate mode, you must set switch five on Switch Bank A **Up**. Switch Bank A is on your left as you look at the printer from the rear. After changing the switches, turn your printer off, and wait five seconds before turning the unit back on.

***

Q: When I start my **HP Vectra ES or ES/12 PC** it automatically comes up with Num Lock on. This is inconvenient, because I sometimes forget to turn it off. Is there a way I can start my Vectra with the Num Lock off?

A: Yes, there is a way. You can create an ASCII file called NUMOFF (not NUMOFF.BAT) which will reside in your root directory. The file should read as follows:

```
E 0000:0417
0 0
Q
```

Then in your AUTOEXEC.BAT file put the statement:

```
Debug <NUMOFF
```

This method has been tested with MS-DOS through version 3.3.

***

Q: In **Microsoft Windows/286**, when I try to run a large MS-DOS application like Drawing Gallery or Executive MemoMaker, I get an error message "Not enough memory to run." Is there anything I can do?

A: You can try modifying your Program Information File (PIF). Use PIFEDIT.EXE to edit your PIF file and change the "KB Desired" field to "-1". This modification allows Windows to swap part of its modules and Windows applications to disc, making more memory available for DOS applications.

***

Welcome to the *HP PC Communicator*

The *HP PC Communicator* is the heart of HP's support program for personal computers and software. The magazine contains programming techniques, information on software updates, notes on using applications, and corrections for manuals. The *HP PC Communicator* also lists known software problems and their solutions, and introduces new members of the HP PC family.

Subscriptions and Back Issues

To order subscriptions, see "Ordering *HP PC Communicator* Subscriptions" in the Current Information green pages. To order individual copies and back issues, see "Ordering *HP PC Communicator* Back Issues" also in the Current Information green pages.

Becoming a Contributor

Much of the material in this issue was submitted by users and HP field-support people. If you'd like to contribute an article, program, question, or suggestion, please send it to us at the following address:

Editor, *HP PC Communicator*
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Sunnyvale, CA 94088 U.S.A.

By submitting information, you agree that the material will not be considered confidential, and that HP may use, copy, edit, modify, publish, or sell it without any liability and without any obligation to you or to anyone else. If we publish your contribution in the *HP PC Communicator,* your name will appear on the by-line. If you'd like us to return the material you submit, please enclose a stamped, self-addressed envelope with it.

We look forward to sharing your ideas with HP PC users throughout the world.

Now on CompuServe

Articles appearing in the *HP PC Communicator* are carried in the HP PC Forum on the CompuServe Information Service. For more information, see "Answers to Your Questions" in the Current Information green pages.

□

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HP PC Forum on CompuServe

Beth Herdle

The Hewlett-Packard Forum on the CompuServe Information Service can be a valuable tool in getting information and answers to your questions about HP personal computers and peripherals.

This article describes the functions of CompuServe and the HP PC Forum, and how to subscribe. Other articles in this issue describe how to use HP personal computers and software to access CompuServe. The articles are entitled:

- HP Vectra PC Family: Using AdvanceLink to Access CompuServe
- HP Vectra PC Family: Using HP Terminal to Access CompuServe
- HP 150/Touchscreen PC: Using AdvanceLink to Access CompuServe
- HP Portable PLUS: Using HP Reflection to Access CompuServe

The HP Forum is maintained jointly by Hewlett-Packard and HP PC users. System Operators (Sysops) answer questions on a bulletin board messaging system and maintain libraries which contain contributed articles and software. Conferences are scheduled periodically for online discussions of selected topics.

HP Response Centers participate in the Forum by providing feedback from users to the HP divisions. They also maintain data libraries for supported patches, application notes, and articles from *the HP PC Communicator.*

To Access CompuServe

To access CompuServe, you must have an account with CompuServe, and a personal computer with a 300, 1200, or 2400 bps modem. There are local phone numbers for most areas in the United States, and CompuServe provides gateway access from around the world. You are billed by CompuServe for the time you spend online.

When you dial the CompuServe Information Service, you are prompted for a personal User ID and Password which are provided with your CompuServe subscription.

After entering your password, you are presented with the CompuServe Main Menu. You can get to areas of the Information Service by navigating through the menus or by using the GO command. When you purchase a CompuServe subscription, you are often given some free time to explore the services available. There is an online HELP system which gives you instructions on what to enter at each prompt.

To Access HP PC Forum

To access the HP PC Forum, type **GO HP** at any "!" prompt. The first time you enter the Forum, you are given a visitor's welcome and special menu, and you are encouraged to join the forum. There is no charge for joining, and this allows you full use of its services.

When you enter the Forum, you see the following main menu:

1 INSTRUCTIONS
2 MESSAGES
3 LIBRARIES (FILES)
4 CONFERENCING
5 ANNOUNCEMENTS FROM SYSOP
6 MEMBER DIRECTORY
7 OPTIONS FOR THIS FORUM

You may first want to select 5 for general information about structure and what is contained in each area.

When you select 2 MESSAGES, you can read messages by subtopics, threads or subjects. You can also add questions or comments. The Sysops and other users do their best to answer your questions about HP products.

Libraries

There are libraries for topics such as HP printers and plotters, the HP Vectra family, HP 150, 110, and handheld computers. Each library contains files which you can browse through or search by keywords.

If you are using a PC with software which supports file transfer (such as AdvanceLink), you can download files from the library to your computer. You can also upload files for other users to access. CompuServe does not charge you for the time you spend uploading files.

Other Vendors Maintain Forums	Other major hardware and software vendors maintain forums on CompuServe. For example, you can access the Microsoft Forums for help with MS-DOS and Microsoft Windows or ask PageMaker questions in the Aldus Forum. Although all forums have the same general structure, each one has its own group of libraries with documentation, utilities and public domain software.
Other CompuServe Services	Although Forums are one of the most popular areas of the CompuServe Information Service, current news, travel information, financial data, interactive games, online conferencing and many more services are also provided.
For More Information	For information about the CompuServe Information Service and how to subscribe, you can talk to your HP Dealer, or call CompuServe at 1-800-848-8199 or 614-457-0802 in Ohio, U.S.A. Or you can write to CompuServe Inc., Telephone Sales, P.O. Box 20212, Columbus, Ohio 43220, USA.

Here are instructions for using AdvanceLink version B.01.00 on an HP Vectra PC to access the CompuServe Information Service.

Configuration

1. Install AdvanceLink according to the Setting Up instructions in the AdvanceLink manual.
2. Run AdvanceLink according to the instructions in the manual.
3. To set the Global Configuration, press `F6 Terminal`, followed by `F6 Config Keys` and `F1 Global Config`. Verify that the "Remote To" field is set to the port to which your modem is connected. For example, if your modem is connected to COM1, the first serial port, this field should read "Serial1". If it does not, tab to this field and use `F2 Next Choice` to change to the correct port. Press `F1 Save Config`.
4. To set the Remote Configuration to match the following settings, press `F6 Config Keys`, then `F2 Remote Config`. Use the Tab key to move between fields, and `F2 Next Choice` to change values.

Point To Point Datacomm Configuration (SerialX)

BaudRate:	1200 (or 300) (or 2400)*	Parity/DataBits: EVEN/7	EnqAck: NO
Asterisk:	Off	Chk Parity: NO	SR(CH): LO
RecvPace:	Xon/Xoff		CS(CB)Xmit: NO
XmitPace:	Xon/Xoff		

*Note: the baud rate you select depends on the modem you are using. The local CompuServe phone number you use may depend on the baud rate.

5. Press `F1 Save Config`.

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Dialing Compuserve

1. Type the commands which your modem requires to dial your phone. For example, for a Hayes™ compatible modem, type **ATDT** followed by the closest access telephone number from the list in the CompuServe IntroPak. Note that for most modems, ATDT must be in capital letters and may be replaced by **ATDP** for pulse dialing. Include any digits required by your phone system to access an outside line. For example:

   ATDT9,xxx-xxxx `Enter`
   where xxx-xxxx is the local CompuServe phone number
2. Wait several seconds for the CONNECT message from your modem, and press either `Enter` or `^C` (the `Ctrl` key together with the letter C).
3. Follow the instructions in the IntroPak to log on to CompuServe and complete the sign-up

2. At the AdvanceLink Main Menu, press F1 Transfer File. Use the Tab and F3 Next Choice keys to set Transfer Direction to "FROM REMOTE" and Transfer Method to "XMODEM". Press F1 Continue.
3. Enter the Local file name (the file to create on the Vectra) and press F1 Start Transfer. When the file transfer is complete, press F8 Done, F8 Done again, and Enter.

   (An alternative method of initiating XMODEM download is to use the AdvanceLink XRECEIVE command. See your AdvanceLink User Guide for details.)

■ **Uploading**

To upload a file from the HP Vectra PC to a CompuServe Forum Library:

1. From the Library menu, initiate the file transfer program on CompuServe by selecting "Upload a New File".
2. Enter the name of the file you want to create on CompuServe. File names on CompuServe can be up to six letters or digits with an optional extension of up to three letters or digits.
3. Select **XMODEM** protocol. Then choose a "Transfer Type" which is ASCII for text files, or Binary for programs or files with control characters. At this point, CompuServe tells you to initiate the XMODEM transfer.
4. At the AdvanceLink Main Menu, press F1 Transfer File. Use the Tab and F3 Next Choice keys to set Transfer Direction to "TO REMOTE" and Transfer Method to "XMODEM". Press F1 Continue.
5. Enter the Local file name (the file on the Vectra you wish to upload) and press F1 Start Transfer. When the file transfer is complete, press F8 Done, F8 Done again, and Enter.
6. After the file is transferred, CompuServe prompts you for a brief description of the file, and a list of keywords which will be used when users browse the Library.

   (An alternative method of initiating XMODEM upload is to use the AdvanceLink XSEND command. See your AdvanceLink User Guide for details.)

Method 2

Disc Logging and ASCII File Transfer

Use disc logging and ASCII file transfer to capture and send text respectively. For example, to capture menus or text scrolling across the screen, use Disc Logging. To compose messages in a text editor on the Vectra and upload them to the Forum message board or EasyPlex electronic mail, use ASCII File Transfer.

These methods provide no error checking and any transmission errors will appear in the transferred text.

■ **Disc Logging**

To transfer text from CompuServe to the HP Vectra PC:

1. Prepare to scroll the text on CompuServe.
2. At the AdvanceLink Main Menu, press `F4 Logging Options`, then `F1 LogFile`. At the prompt "Enter local file name:", type the filename you wish to create on the Vectra.
3. Scroll the text on CompuServe.
4. Press `F1 LogFile` to complete logging.

■ **ASCII File Transfer**

To transfer an ASCII file from the HP Vectra PC to CompuServe:

1. At the AdvanceLink Main Menu, press `F3 Command`, then `F3 AdvLink Command`. At the prompt "Enter a command or the name of a command file:", type **TERMINATOR ^J** `Enter` (Note: Type the actual "^" character, that is `Shift 6`. Do **not** use the `Ctrl` key.)
2. Access the place on CompuServe where you would normally be entering text from the keyboard. For example, select Compose a new message from the EasyPlex Main Menu.

Here are instructions for using HP Terminal on an HP Vectra PC to access the CompuServe Information Service.

Configuration

1. Install HP Terminal according to the instructions in the HP Terminal manual. HP Terminal is also available on the HP Terminal ROM card.
2. Run HP Terminal according to the instructions in the manual.
3. To set the Global Configuration, press `F6 Config Keys` and `F1 Global Config`. Verify that the "Remote To" field is set to the port to which your modem is connected. For example, if your modem is connected to COM1, the first serial port, this field should read "Serial1". If it does not, tab to this field and use `F2 Next Choice` to change to the correct port. Press `F1 Save Config`.
4. To set the Remote Configuration to match the following settings, press `F6 Config Keys`, then `F2 Remote Config`. Use the Tab key to move between fields, and `F2 Next Choice` to change values.

Point To Point Datacomm Configuration (SerialX)

BaudRate:	1200 (or 300) (or 2400)*	Parity/DataBits: EVEN/7	EnqAck: NO
Asterisk:	OFF	Chk Parity: NO	SR(CH): LO
RecvPace:	Xon/Xoff		CS(CB)Xmit: NO
XmitPace:	Xon/Xoff		

*Note: the baud rate you select depends on the modem you are using. The local CompuServe phone number you use may depend on the baud rate.

5. Press `F1 Save Config`.

Dialing Compuserve

1. Type the commands which your modem requires to dial your phone. For example, for a Hayes™ compatible modem, type **ATDT** followed by the closest access telephone number from the list in the CompuServe IntroPak. Note that for most modems, ATDT must be in capital letters and may be replaced by ATDP for pulse dialing. Include any digits required by your phone system to access an outside line. For example:

   ATDT9, xxx-xxxx `Enter`
   where xxx-xxxx is the local CompuServe phone number.

2. Wait several seconds for the CONNECT message from your modem, and press either Enter or ^C (the Ctrl key together with the letter C).
3. Follow the instructions in the IntroPak to log on to CompuServe and complete the sign up procedure.

   Note: When you establish your terminal settings on CompuServe (described in the IntroPak), specify "Other" as the terminal type, with 80 characters per line and 23 lines per page.
4. From the CompuServe Information Service Main Menu, type **GO HP** and press Enter to access the Hewlett-Packard PC Forum.

Transferring Data

HP Terminal does not support file transfer protocols such as XMODEM. You cannot transfer binary files to and from CompuServe using this software. If you would like more extensive file transfer capabilities, you may wish to use AdvanceLink.

You can capture menus or text scrolling across the screen by using Disc Logging. There is no error checking during Disc Logging and any transmission errors will appear in the transferred text.

Disc logging

To transfer text from CompuServe to the HP Vectra PC:

1. Prepare to scroll the text on CompuServe.
2. At the HP Terminal Main Menu, press F1 Copy Data. If there is an asterisk in the F2 ToPrint label, press F2 ToPrint to remove the asterisk. Press F3 To Disc and at the "Enter local file name:" prompt, type the name of the file to create on the Vectra followed by Enter. Press F5 Log Bot to begin disc logging.
3. Scroll the text on CompuServe.
4. Press F4 Log Bot and then F3 To Disc to complete logging.

□

Here are instructions for using AdvanceLink on an HP 150/Touchscreen PC to access the CompuServe Information Service.

Configuration

1. Install AdvanceLink according to the Setting Up instructions in the AdvanceLink manual.
2. Run AdvanceLink according to the instructions in the manual.
3. To set the Global Configuration, press the `User System` key twice, followed by `F8 Config Keys` and `F1 Global Config`. Verify that the "Remote" side of the "Remote/Serial Dev" field is set to the port to which your modem is connected. For example, if your modem is connected to Port1, this field should read "PORT1/PORT2". If it does not, Tab to this field and use `F2 Next Choice` to change to the correct port. Press `F1 Save Config`.
4. Press `F8 Config Keys` again and either `F3 Port1 Config` or `F4 Port2 Config`, depending on which port your modem is connected to. Set your screen to match the following settings. Use the `Tab` key to move between fields, and `F2 Next Choice` to change values.

Full Duplex Hardwired **Port 1 (or 2)**

BaudRate:	1200 (or 300) (or 2400)*	Parity:	Even	DataBits:	7	Clock:	INT
Asterisk:	Off			Stop Bits:	1	EnqAck:	No
TR(CD):	Hi	Check Parity:	No	SR(CH):	Lo		
RecvPace:	Xon/Xoff	SSRXmit:	No	RR(CF)Recv:	No		
XmitPace:	Xon/Xoff	SSRInvert:	No	CS(CB)Xmit:	No	DM(CC)Xmit:	No

*Note: the baud rate you select depends on the modem you are using. The local CompuServe phone number you use may depend on the baud rate.

5. Press `F1 Save Config`. To bring back the AdvanceLink function key labels, hold down the Shift key and press the `User System` key.

Dialing CompuServe

1. Type the commands which your modem requires to dial your phone. For example, for a Hayes™ compatible modem, type **ATDT** followed by the closest access telephone number from the list in the CompuServe IntroPak. Note that for most modems, ATDT must be in capital letters and may be replaced by **ATDP** for pulse dialing. Include any digits required by your phone system to access an outside line. For example:

   ATDT9,xxx-xxxx `Return`
   where xxx-xxxx is the local CompuServe phone number

2. Wait several seconds for the CONNECT message from your modem, and press either `Return` or `^C` (the *Ctrl* key together with the letter C).

3. Follow the instructions in the IntroPak to log on to CompuServe and complete the sign-up procedure.

   Note: Whenever the IntroPak or online instructions ask you to press the `Enter` key, use the `Return` key instead. The `Enter` key on the HP 150 performs a special function and it is not used when accessing CompuServe.

   When you establish your terminal settings on CompuServe (described in the IntroPak), specify "Other" as the terminal type, with 80 characters per line and 24 lines per page.

4. From the CompuServe Information Service Main Menu, type **GO HP** and press `Return` to access the Hewlett-Packard PC Forum.

Transferring Data

There are two methods of transferring files between CompuServe and your HP 150/ Touchscreen PC.

Method 1

XMODEM File Transfer (AdvanceLink versions A.03.01 and greater)

Use XMODEM file transfer when you are transferring files from or to the CompuServe Forum Libraries. XMODEM provides error checking and tells you if the transfer is successful. You must use XMODEM if you are transferring binary files.

■ **Downloading**

To download a file from a CompuServe Forum Library to the HP 150/Touchscreen PC:

1. From the Library menu or prompt, initiate the file transfer program on CompuServe by selecting Download a File. Type in the name of the Library file you wish to download and press `Return`. Select **XMODEM** protocol. At this point, CompuServe tells you to initiate the XMODEM transfer.
2. At the AdvanceLink Main Menu, press `F3 Command`, then `F3 Enter Command`. At the prompt "Enter a command directly:", type **XRECEIVE** <**filename**> `Return` where <filename> is the file to create on the HP 150. When the file transfer is complete, press `Return`.

■ **Uploading**

To upload a file from the HP 150/Touchscreen PC to a CompuServe Forum Library:

1. From the Library menu, initiate the file transfer program on CompuServe by selecting "Upload a New File".
2. Enter the name of the file you want to create on CompuServe. File names on CompuServe can be up to six letters or digits with an optional extension of up to three letters or digits.
3. Select **XModem** protocol. Then choose a "Transfer Type" which is ASCII for text files, or Binary for programs or files with control characters. At this point, CompuServe tells you to initiate the XMODEM transfer.
4. At the AdvanceLink Main Menu, press `F3 Command`, then `F3 Enter Command`. At the prompt "Enter a command directly:", type **XSEND** <**filename**> `Return` where <filename> is the file on the HP 150 you wish to upload.
5. After the file is transferred, CompuServe prompts you for a brief description of the file, and a list of keywords which will be used when users browse the Library.

Method 2

Disc Logging and ASCII File Transfer

Use Disc Logging and ASCII file transfer to capture and send text respectively. For example, to capture menus or text scrolling across the screen, use Disc Logging. To compose messages in a text editor on the HP 150 and upload them to the Forum message board or EasyPlex electronic mail, use ASCII File Transfer.

These methods provide no error checking and any transmission errors will appear in the transferred text.

■ **Disc Logging**

To transfer text from CompuServe to the HP 150/ Touchscreen PC:

1. Prepare to scroll the text on CompuServe.
2. At the AdvanceLink Main Menu, press `F4 Logging Options`, then `F1 Local File`. At the prompt "Enter local log file name (or RETURN):", type the filename you wish to create on the HP 150, then press `Return`.
3. Scroll the text on CompuServe.
4. Press `F1 Local File` to complete logging.

■ **ASCII File Transfer**

To transfer an ASCII file from the HP 150/ Touchscreen to CompuServe:

1. At the AdvanceLink Main Menu, press `F3 Command`, then `F3 Enter Command`. At the prompt "Enter a command directly", type **TERMINATOR ^J** `Return` (**Note:** Type the actual "^" character, that is `shift 6`. Do **not** use the `Ctrl` key.)
2. Access the place on CompuServe where you would normally be entering text from the keyboard. For example, select "Compose a new message" from the EasyPlex Main Menu.
3. Press `F3 Enter Command` again. At the prompt "Enter a command directly:", type **SENDFILE <filename>** `Return` where <filename> is the HP 150 file you wish to upload. The text is transferred line by line to CompuServe. Then proceed with normal CompuServe commands for editing and sending the message.

□

Here are instructions for using HP Reflection 1 on an HP Portable PLUS PC to access the CompuServe Information Service.

Configuration

1. Install HP Reflection according to the instructions in the HP Reflection manual.
2. Run HP Reflection according to the instructions in the manual.
3. Press `F3 Config Keys` then `F3 Terminal Page 1`. Change the "Datacomm port" field to "COM2" using `F1 NEXT CHOICE` then `F5 ACTIVATE CONFIG`.
4. Press `F2 Com2 Config` and set your screen to match the following settings. Use the Tab key to move between fields, and `Next Choice` to change values.

COM 2 Configuration

Baud Rate	1200 (or 300)	Xmit indicator	OFF
Parity	EVEN	DCD required	NO
Check parity	NO	CTS required	NO
Receive pacing	XON/XOFF	DSR required	NO
Transmit pacing	XON/XOFF	Stop bits	1
Enq/Ack pacing	NO	Modem type	INTERNAL

5. Press `F5 Activate Config`.

Dialing CompuServe

1. Type **ATDT** followed by the closest access telephone number from the list in the CompuServe IntroPak. Note that ATDT must be in capital letters and may be replaced by **ATDP** for pulse dialing. Include any digits required by your phone system to access an outside line. For example:

   ATDT9,xxx-xxxx `Return`
   where xxx-xxxx is the local CompuServe phone number
2. Wait several seconds for the CONNECT message, and press either `Return` or `^C` (The `Ctrl` key together with the letter C).
3. Follow the instructions in the IntroPak to log on to CompuServe and complete the sign-up procedure.

   Note: Whenever the IntroPak or online instructions ask you to press the `Enter` key, use the `Return` key instead. The `Enter` key on the Portable PLUS performs a special function and is not used when accessing CompuServe.

   When you establish your terminal settings on CompuServe (described in the IntroPak), specify "Other" as the terminal type, with 80 characters per line and 23 lines per page.

   From the CompuServe Information Service Main Menu, type **GO HP** and press `Return` to access the Hewlett-Packard PC Forum.

Transferring Data

There are two methods of transferring files between CompuServe and your HP Portable PLUS PC.

Method 1

XMODEM File Transfer

Use XMODEM file transfer when you are transferring files from or to the CompuServe Forum Libraries. XMODEM provides error checking and tells you if the transfer is successful. You must use XMODEM if you are transferring binary files.

■ **Downloading**

To download a file from a CompuServe Forum Library to the HP Portable Plus PC:

1. From the Library menu or prompt, initiate the file transfer program on CompuServe by selecting "Download a File". Enter the filename of the Library file you wish to download and press Return. Select **XMODEM** protocol. At this point, CompuServe tells you to initiate the XMODEM transfer.
2. At the Reflection Main Menu, press F5 COMMAND LINE, then type **XRECEIVE <filename>** Return where <filename> is the file to create on the Portable Plus. When the file transfer is complete, press Return twice.

■ **Uploading**

To upload a file from the HP Portable Plus PC to a CompuServe Forum Library:

1. From the Library menu, initiate the file transfer program on CompuServe by selecting "Upload a New File".
2. Enter the name of the file you want to create on CompuServe. File names on CompuServe can be up to six letters or digits with an optional extension of up to three letters or digits.
3. Select **XMODEM** protocol. Then choose a "Transfer Type" which is ASCII for text files, or Binary for programs or files with control characters. At this point, CompuServe prompts you to initiate the XMODEM transfer.
4. At the Reflection Main Menu, press F5 COMMAND LINE, then type **XSEND <filename>** Return where <filename> is the file on the Portable Plus you wish to upload. When Reflection has sent the file, press Return twice.
5. After the file is transferred, CompuServe prompts you for a brief description of the file, and a list of keywords which will be used when users browse the Library.

Method 2

Disc Logging and ASCII File Transfer

Use disc logging and ASCII file transfer to capture and send text respectively. For example, to capture menus or text scrolling across the screen, use Disc Logging. To compose messages in a text editor on the Portable PLUS and upload them to the Forum message board or EasyPlex electronic mail, use ASCII File Transfer.

These methods provide no error checking and any transmission errors will appear in the transferred text.

■ **Disc Logging**

To transfer text from CompuServe to the HP Portable Plus PC:

1. Prepare to scroll the text on CompuServe.
2. At the Reflection Main Menu, press `F1 device control`, then `F3 "to" devices`. If there is an asterisk in the `F5 TO PRINTER` label, press `F5 TO PRINTER` to remove the asterisk. Press `F2 TO DISK` and at the "Enter file name:" prompt, type the name of the file to create on the Portable Plus followed by `Return`. Press `device control`, then `F1 device modes`, and `F3 LOG BOTTOM` to begin disc logging.
3. Scroll the text on CompuServe.
4. Press `F3 LOG BOTTOM`, then `F1 device control`, `F1 "to" devices` and `F2 TO DISK` to complete logging.

■ **ASCII File Transfer**

To transfer an ASCII file from the HP Portable Plus PC to CompuServe:

1. At the Reflection Main Menu, press F3 config keys, then F4 Terminal page 2. Tab to the "Host prompt character" field and type ^J (the CTRL key together with the letter J). The letters LF appear in the field. Press ACTIVATE CONFIG. Press F8 system keys to return to the Main Menu.
2. Access the place on CompuServe where you would normally be entering text from the keyboard. For example, select "Compose a new message" from the EasyPlex Main Menu.
3. Press F5 COMMAND LINE and at the "Command:" prompt, type **TRANSMIT <filename>** where <filename> is the file on the Portable Plus you wish to upload, and press Return. The text is transferred line by line to CompuServe. When the transfer is complete, press Return. Then proceed with normal CompuServe commands for editing and sending the message.

□

HP 150/Touchscreen PC: How to Install a PAM Label

Kathleen Kirk

If you have an application on your HP 150/ Touchscreen PC that does not install with the usual PAM INSTALL, here is how you can make a PAM label.

The *HP 150/MS-DOS User's Guide* has a chapter on Installing Applications in PAM. However, if you don't have your manual handy, here are the steps necessary to create a .IN$ ASCII file that is used by the PAM INSTALL program:

1. Line 1: the name to be displayed in the PAM label (up to 13 characters long).
2. Line 2: Version information. If you do not have this, leave blank (up to 7 characters long).
3. Line 3: The executable file name. It must end in .COM or .EXE (up to 12 characters long).
4. Line 4: The command line to be passed to the main program (Line 3) when execution begins (up to 64 characters long).
5. Line 5: Size of application in bytes. If the application is on a flexible disc, round the size of each file up to the next 1 KB. If the application is on the hard disc, round the size of each file up to the next 4 KB (up to 8 digits long). If you do not have this information, leave blank.
6. Line 6 through N: A list of the files and programs used by the application listed one file name per line.

For example, suppose you wanted to install a PAM label that performs a DIR when executed, you would create a .IN$ file as follows:

```
DOS DIR
1.00.00
COMMAND.COM
/C MYFILE.BAT
```

[intentional blank line]

```
COMMAND.COM
MYFILE.BAT
```

Note that I preceded my command line with the /C switch. Because COMMAND.COM is already loaded, another copy of COMMAND.COM must be loaded with the command line being passed to it containing the /C switch, so that it will treat the remainder of the command line as an executable command.

This will execute a batch file, called MYFILE.BAT, that I have created with the following lines:

```
Cls
Echo This is the contents of my directory ...
Dir
```

Please note:

- Applications must be installed from the root directory to the root directory.
- If the files for the application span more than one disc, insert an asterisk (*) in line 6 where the applications change from one disc to another. The program will pause at this point and ask you to insert the next disc.
- The .IN$ file you are creating must be on the same disc as your program files, or at least on the same disc as the first program to be installed.
- You must install the application to a disc other than the one containing your .IN$ file and application files.

□

Lotus 1-2-3 Graphs with Date Stamping

Steve Brown

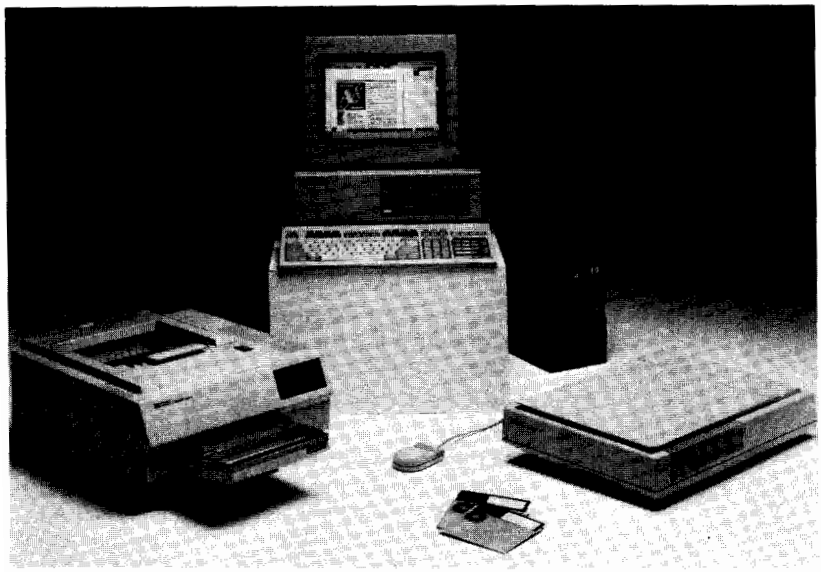
In Lotus 1-2-3, when you want the current date to appear on your spreadsheet printouts, all you need to do is place an @ in the Header Choice of Print Options. Many of you enjoy this feature when printing spreadsheets, but have you been frustrated when you wanted to have the current date appear on all graphs associated with a given worksheet?

The solution requires a few more steps, but is well worth the effort. Here is what you need to do:

1. Enter the formula @NOW IN A CELL
2. Use the Range Format Date and Worksheet Column Set so the cell looks like the current date.
3. Insert a backslash (\) before the cell address, and use it in Graphs Options Titles Second.

For example, you may want the current date to appear on the second line of the graph title. Let's say you have completed steps 1 and 2 in cell A3. You can then do step 3 by entering the Command Menu (\) Graph Options Titles Second. At this point Lotus 1-2-3 is expecting you to enter a title for the second line. Instead of entering words, enter **\A3** and Lotus 1-2-3 will take whatever is in cell A3 and use it for the second line.

□



[Some questions are reprinted from Aldus "Master Pages" newsletter—be sure that you send in your PageMaker registration card to Aldus.]

Q: PageMaker accepts HP Graphics Language (HPGL) format files. Can this type of file be created in Drawing Gallery?

A: In order to create an HPGL file in Drawing Gallery version B.03.00, first run the DEVICEID program on the Utility Master disk to set up an HP 7550A plotter. Then run Drawing Gallery, and on the Device Control screen press **F3 Next Choice** until you see the HP 7550A plotter. Answer **Yes** to **Draw to File,** specify an output file name, and press **Draw to 7550A.** Drawing Gallery version B.03.00 can also output to TIFF files which can be placed in PageMaker. See the "Running the DTP Update" section of your *Setting Up Drawing Gallery and Charting Gallery* booklet for more information.

Q: When I try to open a particular PageMaker publication, I am getting the error "Internal Error, cannot lock block 7009:5125". What does this mean?

A: This error indicates corruption in the publication. It could be caused by restarting the PC while the publication is open. You should be able to open and edit other publications, but you will probably need to recreate this one or work on your last backup of the file.

Q: I turn on the Autoflow command, then place my stories. But when I reflow a text block within the story, the Autoflow command is gray, so I can't select it. Why?

A: For Autoflow to work, your pointer must be loaded with text that extends to the end of your story. So, although the command is checked, Autoflow works only when you're placing a new story, or when you're reflowing the last text block(s) of an already flowed story.

Q: While installing Fontware, I get a message saying that Fontware is clipping my 42-point fonts. Why is this?

A: The point size probably exceeds the maximum point size for your selected printer, so the printer is cutting the tops off (clipping) your letters. The bottom part of the characters will print, but the top won't. An HP LaserJet PLUS printer, for example, can print only up to 30-point type, even if you generated larger soft fonts and used a larger font in PageMaker. In contrast, an HP LaserJet Series II printer can print all the type sizes PageMaker can use. Be sure you don't use or install type sizes larger than your printer can handle.

Q: How can I enter a nonbreaking space in PageMaker?

A: PageMaker allows you to enter the following types of nonbreaking spaces:

Type	Size	Keystrokes (CTRL = control)
Em space	(equal to the point size)	CTRL+SHIFT+m
En space	(½ the point size)	CTRL+SHIFT+n
Thin space	(¼ the point size)	CTRL+SHIFT+t
Fixed space	(normal space)	CTRL+Spacebar

You would put a nonbreaking space at locations in your text where you want a space but do not want PageMaker to break a line.

Q: In PageMaker 1.0a, Script, Roman and Modern fonts were available under Type Specs when using the PCL/LaserJet driver. They no longer appear when using PageMaker 3.0. Can they be installed?

A: These fonts are vector fonts, as opposed to bitmapped, and are treated as graphics, rather than text. Therefore they take up a lot of memory, print very slowly, and are not really of sufficient quality for an HP LaserJet printer.

With PageMaker 3.0, Aldus includes Fontware as a standard part of the product. Since Fontware is a "real" font solution, Aldus disabled Roman, Script and Modern so that they no longer appear in the Type Specs menu.

If you still want to access these fonts, there is a way. Simply type **List vectors = 1** under the PageMaker heading in your WIN.INI file:

```
[PageMaker]
List vectors = 1
```

Q: After manually downloading permanent soft fonts to an HP LaserJet Series II printer, I run PageMaker and print a publication using temporary soft fonts which are downloaded by PageMaker. Now some of my permanent ones in the LaserJet printer have been deleted. Is there a way to use temporary fonts so that they will not overwrite the permanent ones?

A: The best resolution for this problem is to let Windows manage the permanent soft fonts as well as temporary ones. If you are using version 3.0 of the PCL/LaserJet driver, you can easily specify whether fonts are permanent or temporary in the Setup-Printer area of the Windows Control Panel. Windows will set up the files for downloading your permanent fonts and will modify your AUTOEXEC.BAT file so that they are downloaded to the LaserJet printer when you start up the PC.

If you are using an earlier version of the PCL/LaserJet driver, you can manually edit the WIN.INI file to specify which soft fonts are permanent and temporary. See the file READMEHP.TXT on the Windows Utility 1 disc for instructions. In this case, you will continue to download the permanent fonts as usual before entering Windows.

□

PageMaker, HP-GL Graphics and Windows Metafile

Starlene Burgett

You have probably heard about the 64 KB limit on the size of non-TIFF format graphics files that you want to import to PageMaker. (PageMaker manages to link TIFF files together so that they are exempt from the 64 KB limit.) The limit has to do with the size of the Microsoft Windows metafile. But what is a metafile? This article will give you a better understanding.

When placing HP Graphics Language (HP-GL) graphics, the HP-GL filter converts the HP-GL file to a Windows metafile. The metafile contains a sequence of Graphic Device Interface (GDI) functions, similar to HP-GL commands. The information tells how to draw a line, fill a polygon, and so on. The HP-GL file contains vector graphics; the filter does NOT convert the file to raster graphics. The more complex the graphic, the larger the HP-GL file, and thus, the larger the metafile.

The metafile may use more or fewer commands to do the same thing as HP-GL commands. Therefore, the metafile may not be the same size as the HP-GL file. When we say there is a 64 KB limit on HP-GL files placed in PageMaker, what we really mean is that there is a 64 KB limit on the metafile that is created from the HP-GL file. Windows has imposed a 64 KB limit on metafiles.

In PageMaker 1.0a, you may have been able to place an HP-GL graphic file that was slightly larger than 64 KB, but in PageMaker 3.0 you will find that you are unable to place it. This is because in PageMaker 1.0a HP-GL files used a simple import filter that only recognized a subset of HP-GL commands. This filter has been upgraded and is much more complicated in PageMaker 3.0. The new filter recognizes a larger number of HP-GL commands, so the resulting metafile is larger than it was in version 1.0a of PageMaker.

□

Executing Major Applications From MS-DOS Effectively

Brian Rainie

Many major applications require numerous data/library files to execute. An example of this is AdvanceLink. Its execution command runs a memory manager, which then loads specific libraries and overlays code modules. The only problem is that it must be executed from its home directory in order to find everything it needs.

Now, if you are a PAM user, your life is easy. When you select/execute the application, PAM automatically moves you to the AdvanceLink subdirectory before starting the program. But what if you are a DOS person? I prefer using DOS because it gives me more flexibility and power. But how can you gain back the ease of use that PAM gives you?

Using the PATH Command

One approach to resolving this problem is to use the PATH command to allow DOS to find the program you need. Just include the AdvanceLink subdirectory in your PATH command. In this case you also have to alter the ADVLINK.BAT file to include both Change-Disc and Change-Directory commands. I see two problems with this approach:

1. It is not a good idea to alter a master batch file. If you ever update the application, you have to remember to alter the batch file again.
2. By including the AdvanceLink subdirectory in your PATH, every time you request DOS to find a program, it will have to scan that entire directory. If you use this procedure for several major applications, DOS will end up scanning most of your disc.

Using BATCH Files

A better approach is to set up an extra subdirectory on your hard disc called BATCH. Here you can include batch files which alter the disc/directory and then go out and chain to the master batch file directly. This new directory will only have a handful of files in it, so including it in the PATH will not slow down your system. An example of a batch file for AdvanceLink follows.

```
C:
CD \ADVLINK
ADVLINK.BAT
```

Using this approach, you have solved multiple problems.

1. You may now execute AdvanceLink easily from DOS by just typing in the command; and you can be on any disc and in any subdirectory.
2. You can set up different batch files to bring up AdvanceLink in different modes.

As an example, I like AdvanceLink to log on for me automatically. I just set up the special LOGON.SLK file that it looks for, and when it comes up it logs me right on. But what if I am already logged on, and want to return to my session? This is where two batch files come into play.

To execute AdvanceLink and log on automatically, I execute the batch file called ADVLINKL.BAT, shown below:

```
C:
CD \ADVLINK
IF EXIST LOGON REN LOGON LOGON.SLK
ADVLINK.BAT
```

In the example above, LOGON contains my control commands for AdvanceLink. To cause an automatic logon, I simply rename it to LOGON.SLK so AdvanceLink will find it. If I already have an active session, I execute the batch file called ADVLINK.BAT, shown below:

```
C:
CD \ADVLINK
IF EXIST LOGON.SLK REN LOGON.SLK LOGON
ADVLINK.BAT
```

As you can see, this batch file renames the file back to LOGON, so the AdvanceLink application **won't** find it.

□

Saving and Restoring Disc/ Directory Settings

Brian Rainie

In the article "Executing Major Applications From MS-DOS Effectively" in this issue, the methods allow you to easily access an application which must run from a given subdirectory. But there is one drawback: It leaves you in the specified subdirectory and drive. For most people this is a minor annoyance, but I really like the idea of being able to execute AdvanceLink from anywhere on my system and have it return me to where I was before.

So here is the challenge: How do you get MS-DOS to save your current disc and directory settings, then restore them later? The answer requires the use of a couple of small programs. The first one **displays** the current disc and directory, while the second one **sets** it. These utilities do not come with your system, but you can create them by using the instructions that follow.

Creating SHOWDIR.ASM and SETDIR.ASM

1. Use Executive Memo Maker or another word processing package to enter the following text:

```
NSHOWDIR.COM
A 100
PUSH    CS
POP     DS
LEA     SI,[137]
PUSH    SI
MOV     AH,19
INT     21
ADD     [SI],AL
ADD     SI,3
MOV     AH,47
XOR     DL,DL
INT     21
MOV     WORD PTR [SI+40],A0D
MOV     BYTE PTR [SI+42],24
MOV     BX,3F
CMP     BYTE PTR [BX+SI],0
JNZ     012D
MOV     BYTE PTR [BX+SI],20
DEC     BX
JNS     122
POP     DX
MOV     AH,9
INT     21
MOV     AX,4C00
INT     21
DW      3A41
DW      5C
                                    —intentional blank line
F CS:13B L 42 0
R CX
7D
W
Q
```

2. Save this in a file called SHOWDIR.ASM, making sure it is saved as an ASCII file (not a document).
3. Clear your workspace and enter this next set of commands:

```
NSETDIR.COM
A 100
PUSH    CS
POP     DS
LEA     SI,[134]
MOV     AH,A
MOV     DX,SI
INT     21
MOV     AH,E
MOV     BX,2
MOV     DL,[BX+SI]
SUB     DL,41
INT     21
ADD     BL,[SI+1]
DEC     BX
CMP     BYTE PTR [BX+SI],20
JZ      11B
MOV     BYTE PTR [BX+SI+01],0
ADD     SI,4
MOV     AX,3B00
MOV     DX,SI
INT     21
MOV     AX,4C00
INT     21
DB      44
                                    —intentional blank line
F CS:135 L 48 0
R CX
7C
W
Q
```

4. Save this set under the name SETDIR.ASM.
5. From MS-DOS, you can now create the two programs needed using DEBUG. Simply execute the following two commands:

```
DEBUG <SHOWDIR.ASM
DEBUG <SETDIR.ASM
```

6. Once DEBUG has created the programs, test them to make sure they are working properly. If you execute the command SHOWDIR, it should respond by typing out the current disc and directory (for example, C:\UTILS). If you execute the SETDIR program, it should wait for you to type in a drive and directory specification (for example, C:\ADVLINK), then place you on that drive and in that subdirectory.
7. Place your new programs into the subdirectory that you use to hold your utilities, which had better be included in your PATH command.

Using SHOWDIR.ASM and SETDIR.ASM

Now the fun begins. By redirecting standard-out and standard-in, you can use these programs to save and restore your disc/directory settings. My new ADVLINK.BAT file looks like this:

```
SHOWDIR >C:\BATCH\TEMP\SAVEDIR.ANY
C:
SHOWDIR >C:\BATCH\TEMP\SAVEDIR.C
CD \ADVLINK
C:\COMMAND /C ADVLINK.BAT
SETDIR <C:\BATCH\TEMP\SAVDIR.C
SETDIR <C:\BATCH\TEMP\SAVEDIR.ANY
```

This assumes you have built a subdirectory under C:\BATCH called TEMP, used to hold temporary files.

The first SHOWDIR saves your current disc/directory setting. Now it switches you over to the C: drive, where AdvanceLink resides. Next, it must store the current settings on the C: drive, so it can restore them as well. The ADVLINK subdirectory is selected, then the command interpreter is used to "invoke" the ADVLINK.BAT file (so it will come back when it is finished). Finally, the C: drive subdirectory setting is restored, then you are reset to your original drive/subdirectory.

I have found this approach very useful for major applications like AdvanceLink, special software (Network User Code), and even compilers. This is a great way to automate your system!

□

"I keep losing files, and don't know where they are going."

"Sometimes my system takes a very long time to find/open a file."

"One of my subdirectories was full of files, and now I can't access any of them."

"My program keeps aborting with a load failure, even after I restore it back onto the system from a known good master."

"All of a sudden I can't boot from my hard disc, and when I boot from the flexible disc it says that my hard disc is a 'Probable Non-DOS Disc'."

"The function keys in PAM are filled with garbage."

"Every time I try to load a program my system hangs up."

"I keep experiencing intermittent system problems and I can't figure out why."

"I am writing programs at the Assembly Language level and when I do DOS calls the system does not respond the way the manual says it should."

"WordStar keeps losing my documents."

"I added a new card to my ECM database and now it can't find half of my data."

"Our system kept failing so we replaced the hard disc. This fixed it for a while, but after three months it started failing again."

Welcome to the world of the PC Support Engineer. Yes, it takes someone who knows the system inside and out, forward and backward, and down to the most insignificant bits to be able to resolve such a diverse barrage of problems. Well, not really.

Actually, these problems were resolved easily. In each case, the system in question had an "unstable" disc. When I use the term unstable, I mean that only the information on the disc had been disrupted; the hardware was still operating at 100 percent.

The File System

No doubt many of you are already familiar with the internal workings of the MS-DOS file system, but it doesn't hurt to review.

The user views the file system as a directory of file names, each referencing the block of disc space containing its data. This method works well if you have a file system which deals in files of fixed length. But DOS allows you to increase and decrease the size of a given file. For this to work, files are made up of multiple blocks of disc space which don't necessarily fall together in sequence on the disc.

The directory entry uses a File Allocation Table (FAT) to keep track of all the blocks. The FAT is a map of all the blocks on the disc, whether they are currently allocated or not, and shows the file system how to piece them together to represent a file. Every hard disc and every flexible disc reserves a fair amount of space at the beginning to hold a directory and FAT. The remaining disc space is available for data.

When you access a file, the system must use the directory to find the start of the list in the FAT, then use the FAT to get the blocks. Since this is required for every single read and write, we could be talking about a lot of disc access here. To be efficient, duplicates of the directory and FAT are copied into memory whenever a disc is loaded. This approach eliminates the need to constantly access them off the disc.

Now, the bad news. When an application writes to a file, it has to update the directory and FAT. Again, it would be very inefficient to have to update the directory and FAT on disc every time you did a write. Therefore, the file system only updates the memory copy. This means that while a file is being written to, the directory and FAT on the disc itself does not necessarily map to the information being written to the data areas. When the file is closed, the file system copies the new directory and FAT information to the disc to make sure everything is correct.

Causes

What causes a disc to become unstable?

During the time a file is open for write access (that is, while you are saving a document), a reset or power-down of the system leaves the disc drive with new information in the data area and an inaccurate/incomplete directory and FAT. You now have a mismatch.

Usually you would not let this happen. It is unnatural to reset your system while it is writing to disc. The real culprit here is an application that keeps an open work file. Many applications do this to allow users to work on a lot of data at once. As an example, MemoMaker uses an open work file to allow you to work on very large documents, not limiting them to the amount of free memory available. WordStar does the same thing. Database packages use this technique as well. In each case, the application opens the file and uses it as a temporary holding area for data, doing both reads and writes to it. Just before the application terminates, it closes and deletes the file. But think about it! The entire time the application is running there is a file opened for write access. If you have to reset your system, or power it down, you have just disrupted your disc!

It's easy to tell you not to reset your system when in an application that uses an open work file, but we all know that in the real world there are times when you have no other choice. If the application locks up, you MUST reset.

Effects

What are the effects?

It's equivalent to removing a beam from the foundation of your house. At first, you probably won't notice it. As you remodel, and especially as you build on, the house becomes more and more unstable. Soon, a wall might fall down for no reason. Later, the entire structure might collapse into itself.

If you think I am exaggerating, think again. An unstable disc can cause any or all of the effects listed at the beginning of this article. You can build a new file which the system might not be able to find later. The system could eventually lose track of an entire subdirectory (which is nothing more than just a file). Writing to one file might overwrite a piece of another. Think carefully about this one! I am not talking about losing the last part of Aunt Linda's cookie recipe. You could alter a small piece of an application's code, a PAM configuration file, or even the operating system itself.

Fixing Disrupted Discs

How can you fix a disrupted disc?

Most people who are in a support position will tell you to use the CHKDSK utility with the /F parameter to repair the FAT. This is a great little program that analyzes the disc, tells you how many lost clusters and bad chains were found, and then tries its darndest to put all the pieces back together again. It sounds just wonderful to me!

Now, if you talk to an expert, the first thing they ask you is how bad the damage was and how long was it in effect. You see, CHKDSK cannot repair the information within the files themselves. Sure, you can run it and get a stable directory and FAT, but what if your DOS files have been overwritten? Your system may never be the same.

If you can catch the problem early, and the damage is minor (only a few lost clusters), you can typically patch it with CHKDSK and still have a reliable system. But don't rely on the false hope that CHKDSK can fix everything.

What should you do if the damage is not minor? I recommend that you copy (and I do mean COPY) any data files that you have not backed up lately onto flexible discs, reformat your disc, restore all your applications from master discs, and restore any other files from known good backups.

Ways to Protect Yourself

Is there any way to protect yourself?

You bet! Here are a few suggestions:

1. Get your system STABLE. (Use CHKDSK and/or reload.)
2. Put the CHKDSK command into your AUTOEXEC.BAT file. Now, each time your system boots, the CHKDSK utility will check your hard disc and tell you if there is a problem. If no errors are discovered, the system continues normally. If it finds lost clusters, you can then fix it immediately and lose nothing.
3. Please do BACKUPS! Remember also to do a CHKDSK on a disc before backing it up. Why? If the disc is unstable and you do an "image" backup, the restoration of that information recreates an unstable disc. If you keep a bad copy, it comes back as a bad copy.

Is there anything else you can do?

If you communicate with people that develop PC software, the answer is yes. I have found that there IS a way to use an open work file without leaving the system unstable if it is reset. This information is found in the article entitled "Open Work Files—A Safer Approach" in this issue.

The next time an application glitches your disc, kindly send the author of that application a copy of the following article.

□

I am trying to get the attention of anyone who writes applications for MS-DOS.

I know there are times when available memory just isn't enough, and you feel the need to use an open work file to hold information temporarily. What I want to discuss is the side effect. Every time the system is reset, or turned off, the File Allocation Table (FAT) is disrupted. Now does that seem fair to the users?

Personally, I would prefer it if you did not use open work files. The file system is based on the idea that if you want to write to a file you should open it, write to it, and then close it as soon as possible. Until it is closed, the new directory and FAT information has not yet reached the disc, and a reset can be disastrous.

Luckily, I think I may have found an answer. Here is how I created a safe method of work file access.

File Access Facts

Here are some well known facts about file access. If you have written software for PCs, you know the following to be true:

Rule 1: An initial file open can be somewhat slow. If there are a lot of files, it might take DOS a couple of seconds to find the file you want or realize that it must build a new one.

Rule 2: Each file write is buffered. When you perform a file write, the information is not sent to disc right away. It may take a few writes before the first one ever reaches disc.

Rule 3: The directory and FAT information is only updated after a file is closed. All the time a file is opened for write access, there is the possibility of a reset, leaving the system in an unstable state.

Rule 4: A disc reset request flushes the file buffers. This will force the system to complete all writes to the disc, but still won't update the directory and FAT.

Non-Hazardous Read/Write Access

Typically, when you use a work file, you need a file to which you can send information temporarily and then read it back later as needed. But, per Rule 3 above, this can cause serious problems.

The key to getting around this is to "size" your file before using it. I have found that if you access an old file that already has information in it, and therefore all of its blocks allocated in the FAT, it stays stable if you write and read within the allocated size of the file. As long as you don't expand the file, the directory and FAT are not being altered, and a reset does no harm.

When I first started to use this technique, I had my application create the work file, position the file pointer to the size I needed, then close the file to allocate it. After this initial step, the file could be re-opened and used as an open work file. An added benefit was that I did not have to worry about handling an "out of disc space on work file" error. Since the file had been completely allocated, and I was staying within its boundaries, it would never have to expand.

I found only two drawbacks to this. First, two file opens took a little longer. Second, if I wanted to expand the file size I had to do another close and open. The slowness of the DOS directory lookup was taking its toll.

My final solution works well. My program opens a work file for read/write access. To do the initial sizing and any re-sizing, it calls a subroutine which performs the following operations:

1. Creates a duplicate of the original handle. This is equivalent to opening the file again, but is extremely fast and doesn't need to know the file name or access parameters.
2. Re-sizes the file using the duplicate handle.
3. Performs a file close of the duplicate handle. This allocates the file space, updates the directory and FAT on disc, but still leaves the original handle available for reads and writes.

Now my application runs well. It can use an open work file, and I know the possibility of disrupting a disc is very remote.

□

HP Vectra ES and ES/12 PC and Data Comm Ports

Annette Lubar

If you have an HP Vectra ES or ES/12 PC and ROM version B.02.01, you may have been experiencing problems with data comm ports COM1 and COM2. On initialization, the ROMs leave a bit in the Modem Control Register on, which puts the COM ports in loopback mode.

The problem exists only if your configuration contains all of the following:

- HP Vectra ES or ES/12 PC
- ROM B.02.01 version (For your version number, check the ROM BIOS message when you start your PC)
- COM1 or COM2
- Any version of DOS **except** HP's MS-DOS 3.2

The reason the problem is tied to the operating system version is that HP's MS-DOS 3.2 included a utility for the B.02.01 ROM problem. This utility was not implemented in PC-DOS or in HP's MS-DOS 3.3. (MS-DOS 3.1 or earlier is not supported on HP Vectra ES and ES/12 PCs.)

Symptoms and Workarounds

There are two common symptoms of this problem:

- If you have redirected LPT1 to COM1 or COM2, when you try to PRINT a file, the printer stops. Using CTRL-P (to make everything you type go to the printer) also stops the system. The system messages may not indicate the problem.

  You can work around this problem as follows: Before using PRINT or CTRL-P, output to the PRN device using the COPY command. The easiest way to implement this workaround is to put both printer MODE commands and the COPY command in AUTOEXEC.BAT:

```
MODE COM1:96,N,8,1,P
MODE LPT1:=COM1:
COPY AUTOEXEC.BAT PRN
```

  The first MODE command will vary, depending on the serial printer configuration. With these three lines in your AUTOEXEC.BAT file, you can use your serial printer normally. Simply discard the initial printout from the COPY command.

- If AdvanceLink is connected to COM1 or COM2, you will have a problem getting the HP 3000's attention.

  The workaround here is to exit AdvanceLink and run it again. The second time, you can get to the HP 3000.

Solutions

There are two ways you can fix this problem.

- You can obtain a utility called SERPATCH.COM, that can be used with MS-DOS 3.3, from your nearest HP Response Center. In the U.S. call (800) 858-8867, or outside the U.S. call your HP Sales and Service Office and ask for the Personal Computer Response Center.
- You can purchase ROM version B.02.02 for the HP Vectra ES and ES/12 PCs which initilizes the data comm ports correctly. To order, contact your dealer or HP sales representative.

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Moving From Terminals to PCs

Jack Marshall

Many organizations are moving from an environment comprised primarily of terminal-based users to one where a majority of users are working on personal computers. A coordinated effort on the part of Management Information Systems (MIS) staff and a comprehensive Training Program will help your users make this transition.

The following steps are a guide to implementing a Terminal-to-PC Training Program.

1. Standardize the PC hardware and software purchased by your organization, so that most users have the same type of PC, and use the same word processor, spreadsheet program, and so on. For example, our organization uses HP 150/Touchscreen and Vectra ES PCs with HP Word/PC and WordPerfect, Lotus 1-2-3 and RBase 5000/System 5.
2. Establish and maintain a Training Center with standard PC hardware and software. Update equipment as new technology is purchased by your organization.
3. Develop, publish and distribute a Training Course Curriculum. Include a required class sequence for users moving from a terminal-based environment to a PC environment.
4. Schedule classes on a regular basis at varying times and days to accommodate the work schedules of your users.
5. Publish a monthly newsletter with training class schedules and distribute it via hard copy and your electronic mail system.

6. Maintain a course request sign-up sheet for future courses and a student/class database of student attendance by department, course and date. The sign-up sheet provides information on demand for courses, and the database provides statistics for future course planning and management reporting.
7. Review calls to your MIS Help Line or PC user assistance staff for indications that additional training classes or new training classes with a different focus are required.
8. Develop new classes in advance of the installation of new PC hardware or software.
9. Coordinate training classes to coincide with the delivery of new technology.

The above steps will help you implement and maintain a comprehensive Training Program in your organization for improved effectiveness of both terminal-based and PC users.

□

Jack Marshall of the City and County of San Francisco contributed this article.

Guaranteed Data Communication Failures—A Structured Approach

Brian Rainie

[Editor's note: We thought you would enjoy this humorous look at data communication failures.]

Are you the proud owner of an HP 3000? Are you afraid of PCs? Do you want to make sure none of those PC-types ever get onto your system? Just follow the guidelines shown below, and I can guarantee that they will never access your computer successfully.

1. Always make your own datacomm cables. This will save you lots of money and give you experience in soldering connections. When you start to put them together, remember the following important facts:
   - Never use shielded cable. It is too expensive and we all know that RFI can't penetrate the plastic coating on the wires.
   - The HP 3000 only requires three wires to talk to a PC: transmit, receive, and common ground. Since the HP 3000 and the PC are plugged into the same building power, you already have a common ground—so you only need a two-conductor cable. Telephone wire is cheap.
2. String your data comm lines under carpets, around transformers, under heaters, between buildings, and through construction sites. Make sure they go through at least four punch-down blocks, preferably sharing the connections with standard telephone lines. And never label anything. The data comm board in the PC produces such a wonderful display of sparks and smoke when it gets a 48-volt ring by mistake.
3. Make sure your cables are at least 1000 feet beyond the 50 foot limit, and always configure your PCs to run at 19,200 PBS. Losing every third character isn't really so bad.

4. Configure your HP 3000 ports for term type 12. This will lock out the inexperienced users and give your support staff something to do.
5. If you are given the opportunity of configuring the hardware of the PCs, these steps should help [destroy it]:
   - Anti-static mats are for software types. Hardware experts know they are a waste of time.
   - After you set up the system, throw out any documentation you used to put it together. Why waste shelf space with useless information?
6. When you distribute the terminal emulation software to the PC users, **never** give them master discs. If they really know PCs, they'll figure out the installation process themselves. Don't give them the manuals. The software makes the PC look just like any other terminal, and they already know how to use a terminal, right?

Yes, you too can wreak havoc with the computer industry. Just follow these basic steps and you can bring data communications to a complete halt.

□

HP Vectra LS/12 Laptop PC— The New Laptop 80L286 Computer

Peter Neidecker

The HP Vectra LS/12 is HP's new offering in the laptop computer market. The LS/12 combines laptop flexibility with desktop power at a competitive price. It is ideal for the professional who demands both performance and portability.

Two Models

The HP Vectra LS/12 Laptop PC is available in two hard disc configurations:

HP Product	Model	Description
D1024A	Model 24	3.5-inch, 1.44 MB flexible disc, 20 MB hard disc
D1044A	Model 44	3.5-inch, 1.44 MB flexible disc, 40 MB hard disc

System Features

Both HP Vectra LS/12 models include the following system features:

- 12 MHz Intel 80L286 (low power NMOS) microprocessor, switchable to 6 MHz
- 16 Bit memory bus
- 1 MB RAM memory, presently expandable to 2 MB RAM
- One serial and one parallel port
- Connectors for external flexible disc/tape drive, numeric keypad, RGB monitor
- Internal slots for modem, memory expansion, and 80C287 numeric coprocessor
- Full-function 79-key keyboard
- Choice of 20 MB or 40 MB hard disc drive with 28 ms access time
- 10-inch electroluminescent backlit supertwist LCD
- Resolution: 640x400 text, 640x200 double-scan CGA graphics
- Weight: 10.5 lbs (4.9 kg) without battery pack, 14.6 lbs (6.8 kg) with battery pack

Supported Software	The following operating system and system software are supported on the HP Vectra LS/12 Laptop PC: ■ Microsoft MS-DOS 3.3, includes Personal Applications Manager ■ Microsoft Windows/286, version 2.1 ■ System utilities, HP Disc Cache, HP Terminal Emulation Software and Battery Watch included
Accessories	The following accessories will be available: ■ 1 MB memory expansion card (HP D1054A) ■ 12 MHz Intel 80C287 numeric coprocessor (HP D1053A) ■ 2400 BPS internal modem; operates at 300/1200/2400 BPS (HP D1052A) ■ 48 watt-hour NiCad battery pack (HP D1057A) ■ Battery charger/AC adapter (HP D1058A) ■ Carrying case (HP 35178F) ■ Monitor stand (HP 92166K)
To Order	To order, or for more information, contact your dealer or HP sales representative.

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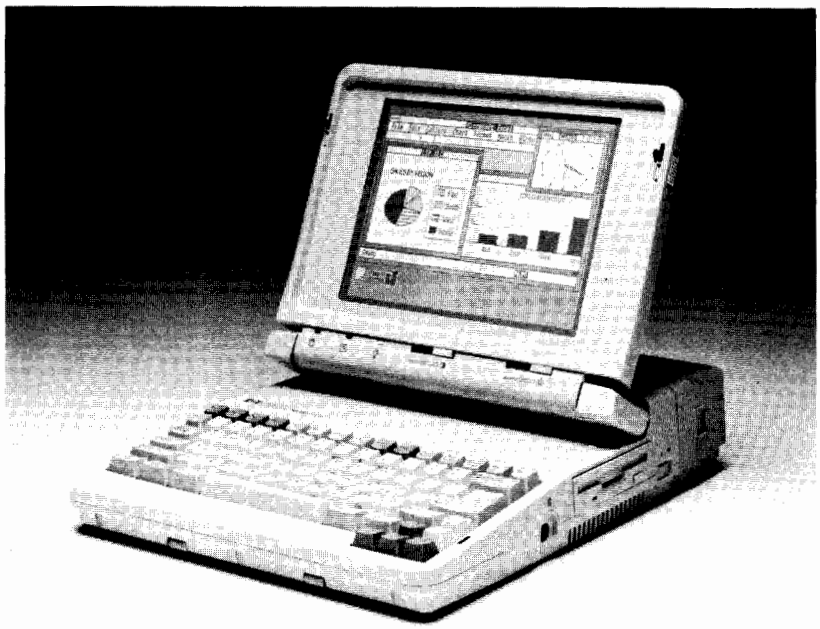

Enhanced AdvanceLink— The Right Connection

Nicola Cowburn

A new enhanced version of AdvanceLink, version B.02.00, is now available.

AdvanceLink is a comprehensive data communications software package for the HP Vectra PC family which provides terminal emulation capabilities for host program execution, file transfer for data exchange, and command language for building integrated PC/host environments.

The new enhanced AdvanceLink, version B.02.00, enables you to fully integrate your PC into your work group. With it you have all the tools, terminal capabilities, file transfer, and command language to perform the connection management and data exchange that you need.

New Features

AdvanceLink B.02.00 offers the following new features:

- HP OfficeShare LAN TELNET support offers terminal emulation capability to PCs on an OfficeShare LAN connected to an HP 9000 or HP 1000RTE host computer.
- Color alphanumeric text for improved HP 2627 terminal emulation.
- Forms cache to disc functionality offers enhanced HP 2624 terminal emulation.
- Eicon™ LAN X.25 INT14h Interface Certification enables you to connect remote PCs or LANs (for example HP OfficeShare or Novell) to your host computer via an X.25 pad.
- Reduced memory requirement enables HP OfficeShare III and terminal emulation in graphics mode to run concurrently.
- AdvancePrint support
- VGA support
- Improved Hostcontrol Command improves the reliability of PC/host interaction.
- HP Vectra LS/12 Laptop PC support.

Extend the Connection with AdvancePrint

By extending the AdvanceLink connection to your HP 3000 with the AdvancePrint option, you can extend your printing capabilities. The AdvanceLink/AdvancePrint combination gives the serial-based HP 3000 user advanced shared printing and plotting, terminal emulation, file transfer, PC backup, and data communications, all using the existing basic serial connection. By including the AdvancePrint option, you save on the AdvancePrint standalone price.

To Order

HP Product	Description
68333F	AdvanceLink 5.25-inch Media
68333F Option 003	AdvanceLink 3.5-inch Media
68333F Option 100	AdvancePrint 5.25-inch Media
68333F Option 103	AdvancePrint 3.5-inch Media
68333L*	AdvanceLink Ten User Right-To-Copy
68333L* Option 100	AdvancePrint Ten User Right-To-Copy

To order, or for more information, contact your dealer or HP sales representative.

Upgrades

Upgrades from any previous version of AdvanceLink to version B.02.00 are available on return of your Application Master disc to HP's Direct Marketing Division in the U.S. Outside the U.S., contact your dealer or HP sales office. For more details, see "Software Exchange Kits" in the green pages of this issue.

HP Part Number	Description
68333-65016	AdvanceLink Upgrade 5.25-inch Media
68333-63003	AdvanceLink Upgrade 3.5-inch Media
68333Z*	AdvanceLink Upgrade Ten User Right-To-Copy

*Site License includes both 3.5-inch and 5.25-inch media.

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	Depending on where you purchased a software or hardware product, the best source of assistance for that product may be your own organization, your dealer or value-added reseller, the original developer, or Hewlett-Packard.
Is the answer available through CompuServe?	Many of the answers to your questions about HP personal computers are available through the CompuServe Information Service—the largest electronic information service in the world. Through CompuServe you can use the Hewlett-Packard PC Forum, which is maintained jointly by HP and HP users. HP maintains libraries on the Forum, containing questions and answers, application notes, and supported patches. The user community offers programs, utilities, and other information. The Forum also provides an easy way for you to communicate with other users. By leaving a message, you can exchange information to help you resolve problems or make decisions. To access the HP PC Forum, you must have an account with CompuServe, a modem, and communication software such as AdvanceLink. For information about the CompuServe Information Service and how to subscribe, you can talk to your HP Dealer, or call CompuServe at 1-800-848-8199 or 614-457-0802 in Ohio, U.S.A. Or you can write to CompuServe Inc., Telephone Sales, P.O. Box 20212, Columbus, Ohio 43220.
Is support provided from within your own organization?	If you work in an organization which has many personal computers, there is often one person who coordinates the purchase, set-up, and training. (For example, each HP division or office has an Office Automation Coordinator, usually part of the Information Systems Department.) Your internal support people have full knowledge of your organization's overall system: your internally-developed programs, your unique operating and networking procedures ... and your specific configuration. Your experts, in turn, have access to special resources through your dealer or HP. Support services such as consulting, can be purchased from HP or your dealer to supplement your internal capabilities.

Was this product purchased from a dealer or value-added reseller?	If you purchased this product from a dealer or value-added reseller (VAR), they have worked with you to define your application and configure your system—perhaps selecting software or hardware not supplied by HP. Here, your dealer or VAR is the best source of assistance—knowing you, your needs, and your configuration well. Authorized dealers and VARs are backed up by special resources within HP . . . and, of course, you have access to HP's full range of support services as a supplement. By buying your hardware, software, accessories, and supplies from an authorized HP dealer or VAR who provides full support, you build up a continuing relationship—providing a local, personal, and uniquely-responsive support program customized for you.
Was this product provided by an independent vendor?	If the product was developed by an independent software vendor (ISV) or an independent hardware vendor (IHV), support—because of the specialized knowledge required—comes either directly from the original developer or through the dealer or value-added reseller from whom you purchased it.
Telephone assistance from HP	You can obtain telephone assistance from the worldwide network of Hewlett-Packard Response Centers for most products distributed by HP. (For certain specialized non-HP-developed products which are distributed by HP, we have arranged for support directly from the original developer —as indicated in the product data sheet and documentation.) While specifics vary somewhat from country to country, here's how the U.S./Canada program works. ■ The toll-free U.S./Canada HP HelpLine is open Monday through Friday from 7 a.m. to 9 p.m. Eastern Standard Time.

- In the U.S. and Canada, calls are paid for by one of three means:
  - —By identifying yourself under a specific support contract. To order, refer to the article "HP PC Software Support" later in this issue.
  - —By quoting a unique "certificate number" from a Call Certificate. Certificate packs can be ordered as product number HP 35159A from HP DIRECT.
  - —By providing a VISA, MasterCard, or American Express charge authorization.
- When you call, a coordinator arranges for the appropriate HP person to call you within two hours. Using a full set of software and documentation—together with computer knowledge, problem-solving skills, and access to others via HP's worldwide telecommunications network—we work with you to answer your question.

Training or consulting

Your need for support may be most efficiently and economically met by training or consulting:

- Training is available from your dealer, your VAR, or HP to supplement the documentation that accompanies your product. Courses can help users rapidly build confidence and gain new skills away from the distractions of their job. These courses can be taught at your facility using your own systems. Training to suit your specific needs can be designed and provided.
- Consulting service—available from your dealer, your VAR, or HP—provides personalized assistance in system operation, recommendations for improved performance, or suggestions on application design.

□

Users Group: Interex

JoLynn Werner

Get in Touch

To get in touch with Vectra PC, Touchscreen/150, HP 12x, and Portable owners in your area—and worldwide—join Interex, the International Association of Hewlett-Packard Computer Users. Interex is an independent group of HP computer users, with chapters and regional groups in 60 countries. If you join Interex, you will receive, at no cost, an assortment of *HP PC Communicator* back issues which pertain to your computer model. (There is a limited supply for some computer models.)

Start a Local Chapter

Local Interex Personal Computer chapters are now forming. For details on joining or starting a group in your area, contact Interex headquarters and ask for the pamphlet "Starting a Regional User Group."

Member Services

Standard Users Support Service includes a subscription to *INTERACT* Magazine, a subscription to the *Interrupt* newsletter (Portable Users will receive *The Portable Paper*, and *INTERACT*), an annual diskette from the Interex Contributed Software Library, and the option to purchase other diskettes at only $10.00 each. Ask for your free listing of Series 100 or Vectra programs.

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For more information, contact:

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U.S.A.
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Telex #4971527
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Application for Personal Computer Services

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(over)

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☐ The Portable (HP 110)	☐ 3½-inch	
☐ Portable Plus	☐ 3½-inch	
☐ HP 120 or HP 125	☐ 3½-inch	☐ 5¼-inch
☐ HP Touchscreen/150	☐ 3½-inch single-sided	☐ 3½-inch double-sided
☐ HP Vectra		☐ 5¼-inch

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Ref. 11

The HP Vectra Personal Computer Systems

Steve Keilen,
Dave Shaw, Michael Weir

The HP Vectra Personal Computers are a family of high-performance PCs designed to provide hardware and software compatibility with industry standards. Members of the Vectra PC family include the following:

The Vectra CS PC, a 7.16 MHz 8086-compatible, is the entry-level member of the Vectra PC family that delivers exceptional value for basic office computing needs.

The Vectra ES PC, an 8 MHz Intel 80286 IBM PC/AT compatible, offers mainstream business users growth to the next generation operating systems (OS/2) at an economical price.

The Vectra ES/12 PC, based on the 12 MHz Intel 80286 processor, provides superior performance and IBM PC/AT compatibility for the demanding business user.

The new **Vectra LS/12 Laptop PC**, a 12MHz Intel 80L286 portable, offers industry standard compatibility, and is ideal for the professional who demands both performance and flexibility.

The Vectra QS/16 PC offers the power and performance of the 16 MHz Intel 80386 microprocessor in a desktop package.

The new **Vectra RS/20C PC** offers all the benefits of the expandable, floor-mount RS/20 PC, but adds a memory cache to gain even greater performance from the 20 MHz 80386 chip.

The new **Vectra RS/25C PC** incorporates a 25 MHz 80386 processor in a floor-mount package. The combination of a memory cache and the 25 MHz processor carries the RS/25C to the forefront of microcomputer performance.

The Vectra CS PC

Each of the following models includes a 7.16 MHz processor, compatible with the Intel 8086, 640 Kbytes RAM, both serial and parallel I/O interfaces, the HP Terminal Program, HP Vectra Disc Cache Program, the Enhanced Vectra PC keyboard, user documentation, and video adapter cards and disc storage as indicated.

D1110A Vectra CS Model 10*
Includes one 5.25-inch 360 KB flexible disc drive.

D1115A Vectra CS Model 15*
Includes one 3.5-inch 1.44 MB flexible disc drive.

D1116A Vectra CS Model 16*
Includes two 5.25-inch 360 KB flexible disc drives and an HP Video Graphics Adapter.

D1120A Vectra CS Model 20*
Includes one 5.25-inch 360 KB flexible disc drive and a 20 MB hard disc.

D1126A Vectra CS Model 26*
Includes one 5.25-inch 360 KB flexible disc drive, a 20–Mbyte hard disc, and an HP Video Graphics Adapter.

D1127A Vectra CS Model 27*
Includes one 3.5-inch 1.44 MB flexible disc drive, a 20 MB hard disc, and an HP Video Graphics Adapter.

*Must Order Language Option. Option ABA is U.S. English. International language versions are available. See your dealer or HP sales representative for more information.

The Vectra ES PC

The Vectra ES may be purchased in a variety of configurations for flexibility in assembling specific systems.

Each of the following models includes an 8 MHz Intel 80286 processor, 640 KB of RAM, a flexible and hard disc controller, both a serial and parallel I/O interface, an HP-HIL port, the HP Terminal Program, HP Vectra Disc Cache Program, the Enhanced Vectra PC keyboard, user documentation, and video adapter cards and disc storage as indicated.

D1210A Vectra ES Model 10*
Includes one 5.25-inch 1.2 MB flexible disc drive.

D1215A Vectra ES Model 15*
Includes one 3.5-inch 1.44 MB flexible disc drive.

D1220A Vectra ES Model 20*
Includes one 5.25-inch 1.2 MB flexible disc drive and a 20 MB hard disc.

D1226A Vectra ES Model 26*
Includes one 5.25-inch 1.2 MB flexible disc drive, a 20 MB hard disc, and an HP Video Graphics Adapter.

D1227A Vectra ES Model 27*
Includes one 3.5-inch 1.44 MB flexible disc drive, a 20 MB hard disc and an HP Video Graphics Adapter.

*Must Order Language Option. Option ABA is U.S. English. International language versions are available. See your dealer or HP sales representative for more information.

The Vectra ES/12 PC

The Vectra ES/12 may be purchased in a variety of configurations for flexibility in assembling specific systems.

Each of the following models includes a 12 MHz Intel 80286 processor, 640 KB of RAM, a flexible and hard disc controller, both a serial and parallel I/O interface, an HP-HIL port, the HP Terminal Program, HP Vectra Disc Cache Program, the Enhanced Vectra PC keyboard, user documentation, and video adapter cards and disc storage as indicated.

D1310A Vectra ES/12 Model 10*
Includes one 5.25-inch 1.2 MB flexible disc drive.

D1315A Vectra ES/12 Model 15*
Includes one 3.5-inch 1.44 MB flexible disc drive.

D1320A Vectra ES/12 Model 20*
Includes one 5.25-inch 1.2 MB flexible disc drive and a 20 MB hard disc.

D1326A Vectra ES/12 Model 26*
Includes one 5.25-inch 1.2 MB flexible disc drive, a 20 MB hard disc, and an HP Video Graphics Adapter.

D1327A Vectra ES/12 Model 27*
Includes one 3.5-inch 1.44 MB flexible disc drive, a 20 MB hard disc, and an HP Video Graphics Adapter.

D1340A Vectra ES/12 Model 40*
Includes one 5.25-inch 1.2 MB flexible disc drive and a 40 MB hard disc.

D1346A Vectra ES/12 Model 46*
Includes one 5.25-inch 1.2 MB flexible disc drive, a 40 MB hard disc, and an HP Video Graphics Adapter.

D1347A Vectra ES/12 Model 47*
Includes one 3.5-inch 1.44 MB flexible disc drive, a 40 MB hard disc, and an HP Video Graphics Adapter.

*Must Order Language Option. Option ABA is U.S. English. International language versions are available. See your dealer or HP sales representative for more information.

The Vectra QS/16 PC

Each of the following models of the HP Vectra QS/16 PC includes a 16 MHz Intel 80386 processor, 1 MB RAM, a combination flexible disc controller and hard disc controller with serial and parallel I/O interfaces, an HP-HIL port, the HP Terminal Program, HP Vectra Disc Cache Program, the Enhanced Vectra PC Keyboard, user documentation, and video adapter cards and disc storage as indicated.

D1400A Vectra QS/16 Model 10*
Includes one 5.25-inch 1.2 MB flexible disc drive.

D1401A Vectra QS/16 Model 40*
Includes one 5.25-inch 1.2 MB flexible disc drive and a 40 MB hard disc.

D1402A Vectra QS/16 Model 46*
Includes one 5.25-inch 1.2 MB flexible disc drive, a 40 MB hard disc, and an HP Video Graphics Adapter.

D1404A Vectra QS/16 Model 47*
Includes one 3.5-inch 1.44 MB flexible disc drive, a 40 MB hard disc, and an HP Video Graphics Adapter.

*Must order country/language option. Option ABA is U.S. English. International versions are also available. See your HP dealer or sales representative for more information.

The Vectra RS/20C and RS/25C PCs

The Vectra RS PCs may be purchased in a variety of configurations for flexibility in assembling specific systems.

The Vectra RS/20C and RS/25C PC configurations have a 20 MHz (RS/20C) or 25 MHz (RS/25C) 80386 microprocessor, a 32 KB memory cache subsystem, a 1.2 MB, 5.25-inch flexible disc drive, a hard disc (ESDI) and a flexible disc controller, and one serial and one parallel port. They also include a system manual, software utilities, dual locks, and the 101-key PC/AT-type DIN keyboard.

D2002A Vectra RS/20C Model 100e*
Includes 1 MB of system memory, one 5.25-inch 1.2 MB flexible disc drive, and a 103 MB ESDI hard disc.

D2003A Vectra RS/20C Model 150e*
Includes 1 MB of system memory, one 5.25-inch 1.2 MB flexible disc drive, and 155 MB ESDI hard disc.

D2004A Vectra RS/20C Model 154e*
Includes 4 MB of system memory, one 5.25-inch 1.2 MB flexible disc drive, and a 155 MB ESDI hard disc.

D2022A Vectra RS/25C Model 100e*
Includes 1 MB of system memory, one 5.25-inch 1.2 MB flexible disc drive, and a 103 MB ESDI hard disc.

D2023A Vectra RS/25C Model 150e*
Includes 1 MB of system memory, one 5.25-inch 1.2 MB flexible disc drive, and a 155 MB ESDI hard disc.

D2024A Vectra RS/25C Model 154e*
Includes 4 MB of system memory, one 5.25-inch 1.2 MB flexible disc drive, and a 155 MB ESDI hard disc.

D2025A Vectra RS/25C Model 304e*
Includes 4 MB of system memory, one 5.25-inch 1.2 MB flexible disc drive, and a 310 MB ESDI hard disc.

*Must Order Language Option. Option ABA is U.S. English. International language versions are available. See your HP dealer or sales repesentative for more information.

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U.S. Touchscreen/150 Software Available from HP

Harry Cruickshank, Joni Kapeckas, Ray Rafiti, Marilyn Ruel, Michael Weir

To determine which U.S. products are recommended for use with localized computers, check with your dealer or HP sales office.

Name	HP Product Number	Version	Special Requirements
COMMUNICATIONS:			
AdvanceLink*	45431A	A.04.04	
AdvanceMail	27534A	A.01.00	Requires HP DeskManager B.00.00 or later on the HP 3000
HPMessage	36568A	A.00.02	Requires HP Desk Manager A.03.01 on the HP 3000
HP Message Disc Pack	36568S	A.00.02	
HP Message Doc Pack	36568T	A.00.02	
HP Message Corp. Lic.	36568Q	A.00.02	
IBM 3278 Term. Emul. Acces.*	45641B		
HP ThinLAN Server Kit	50907A		Dedicated network server, 512K memory required
HP ThinLAN User Link Kit	50908A		512K memory required
HP ThinLAN Server Software for HP Touchscreen PCs	50913A		Software, 512K memory required
HP ThinLAN User Software for HP Touchscreen PCs	50914A		Software, 512K memory required
HP ThinLAN User PC Configuration & Diagnostics Package/ Touchscreen	50929A		
SERIAL Network PC User Configuration & Diagnostics Package/ Touchscreen	50930A		
HP OfficeShare Network Server Software Upgrade to HP ThinLAN Server Software for HP Touchscreen PCs	50915A		Includes HP ThinLAN Server and PC Config and Diagnostics Software and License for PCs; must return OfficeShare master discs

*Uses HP Touch

Name	HP Product Number	Version	Special Requirements
HP OfficeShare Network User Software Upgrade to HP ThinLAN User Software for HP Touchscreen PCs	50916A		Must return OfficeShare master discs
HP SERIAL Network User Link Software for HP Touchscreen PCs	50910A		
VT100 Terminal Emulator	45412A		
Office Talk (Phone Voice Mgmt.)	24520A	A.01.02	512K
ENVIRONMENT MANAGER:			
Microsoft Windows	45875A	1.03	DOS 3.2, 384K memory (512K is recommended), dual flexible disc system (one 710K byte disk is needed) or single flexible disc (260K or 710K) with hard disc
DATA BASE MANAGEMENT:			
Executive Card Manager*	45421A	A.02.02	
R:Base 5000	45563A	1.01	512K
GRAPHICS:			
The Graphics Gallery Collection*	45437A		384K
HP Graphics Curator/ 3000 (36926R gives you "right to copy")	36926A or 36926R	For use with HP 3000. Curator RTU 36926A S/3X #310 S/5X #320 S/7X #330 Curator RTC 36926R S/3X #310 S/5X #320 S/7X #330	

*Uses HP Touch

Name	HP Product Number	Version	Special Requirements
PROGRAMMING LANGUAGES AND DEVELOPMENT TOOLS:			
BASIC by Microsoft	45445D		
BASIC Programmer's Library	45310A		
COBOL by Microsoft	45448A		
Compiled BASIC by Microsoft	45446D		
Cross Reference Utility	92248BA		
Forms Master*	45443A		
FORTRAN by Microsoft	45449D		
GW-BASIC by Microsoft*	45450D		
ICON Design System*	45311A		
Pascal by Microsoft	45447D		
SHARED RESOURCES:			
AdvancePrint	32584A		For use with HP 3000
SPREADSHEETS:			
Lotus 1-2-3*	45566A	2.01	384K
UTILITIES:			
HP PLCPak	33406A		
WORD PROCESSING:			
HPWORD/150 U.S. English*	27505A	A.00.00	512K
Executive MemoMaker*	45418A	C.03.00	384K for text 512K for text and graphics
Microsoft WORD*	45474D	1.10	Now includes Microsoft Spell
MultiMate*	45424A	3.29	
WordStar Professional	45427D	3.34	384K + dual double sided disk drive

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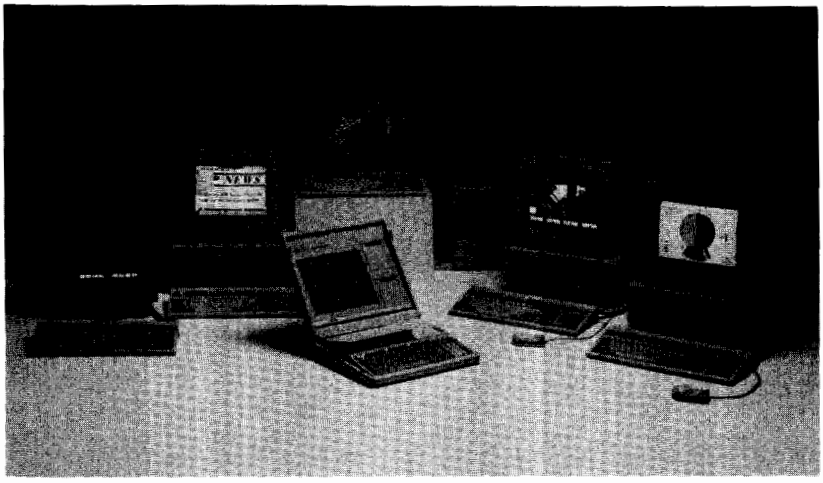
*Uses HP Touch



To determine which U.S. products are recommended for use with localized computers, check with your dealer or HP office.

A worldwide corporate Site Licensing Program offering customers up to 75 percent savings is now available for large quantity purchases of specified software. Below these products are marked with a "†" sign. Contact your HP sales office for specifics.

★Software available in 3½-inch media for the HP Vectra Computers (including the HP Portable Vectra CS) and IBM and compatibles, Order Option 003. Software that is available on 3½-inch media is indicated with a "★" beside the product number.

Name	HP Product Number	Version	Special Requirements
COMMUNICATIONS:			
AdvanceLink†	★68333F	B.01.00	
Opt. 100 AdvancePrint (5.25-inch media)			
Opt. 103 AdvancePrint (3.5-inch media)			
HP IRMA IBM3278/79 Term Emul	50920A		
HPMessage†	36569E		Requires HPDesk Message A.03.01 on the HP 3000
AdvanceMail†	★27535F	B.00.00	Requires HPDesk Manager on the HP 3000
Network Services-User Services/ Vectra PC	50923F		
10 user license	50923F	#OA9	
50 user license	50923F	#OAA	
HP StarLAN User Upgrade Kit	50923F	#OCJ	
HP ThinLAN User Upgrade Kit	50923F	#OCK	
HP SERIAL User Upgrade Kit	50923F	#OCL	
Net1PC/RPM Development Package	50924F		

†Corporate Site Licensing also available

Name	HP Product Number	Version	Special Requirements
PC ServerSoftware/ Vectra PC	50925F		
HP StarLAN Server Upgrade Kit	50925F	#OCJ	
HP ThinLAN Server Upgrade Kit	50925F	#OCK	
HP StarLAN/ Vectra PC Link	50926F		
HP ThinLAN/ Vectra PC Link	50927F		
HP SERIAL Network/ Vectra PC Link Software	50928F		
HP ThinLAN User PC Configuration & Diagnostics Package/ Touchscreen	50929A		
10 user license	50929A	#OA9	
50 user license	50929A	#OAA	
LAN PC User Configuration & Diagnostics Package/ Vectra PC	50929F		
10 user license	50929F	#OA9	
50 user license	50929F	#OAA	
HP ThinLAN/ StarLAN Config Upgrade Kit	50929F	#OCN	

Name	HP Product Number	Version	Special Requirements
HP SERIAL Network PC User Config. & Diagnostics Package/ Touchscreen	50930A		
10 user license	50930A	#OA9	
50 user license	50930A	#OAA	
HP SERIAL Network PC User Config. & Diagnostics Package/ Vectra PC	50930F		
10 user license	50930F	#OA9	
50 user license	50930F	#OAA	
HP Serial Config Upgrade Kit	50930F	#OCL	
HP 150 ThinLAN Server Kit	50907A		
HP 150 ThinLAN User Link Kit	50908A		
HP 150 SERIAL User Link Software	50910A		
HP ThinLAN Server Software for HP Vectra PCs	50913F		Software, 512K memory required
HP ThinLAN User Software for HP Vectra/ IBM PCs	50914F		Software, 512K memory required
ENVIRONMENT MANAGER:			
Microsoft Windows/286			
5¼-inch media	D1318A	#ABA	
3½-inch media	D1318B	#ABA	
Microsoft Windows/386 includes 5¼-inch and 3½-inch media)	D1651A	#ABA	

Name	HP Product Number	Version	Special Requirements
DATA BASE MANAGEMENT:			
Executive Card Manager (ECM)*†	★68331F	A.01.08	
R:Base 5000	68336F	1.01	512K memory required
DESKTOP PUBLISHING:			
iPrint	35188D		
Vectra PageMaker	45964A		MS Windows required
GRAPHICS:			
Drawing Gallery*†	68351F	B.03.00	384K memory and mouse required
Charting Gallery*†	68350F	B.03.00	
The Graphics Gallery Collection*†	★68352F	B.03.00	384K memory and mouse required
Office Activities Portfolio*	★68324F	A.01.00	
Business Mgmt. Portfolio*	★68326F	A.01.01	
Chemical/ PetroChemical Portfolio	★68325F	A.01.00	
HPDraw Figures Portfolio for Drawing Gallery	★68327F	A.01.00	
HP Graphics Curator/3000 (36926R gives you "right to copy")	36926A or 36926R		For use with HP 3000. Curator RTU 36926A S/3X #310 S/5X #320 S/7X #330 Curator RTC 36926R S/3X #310 S/5X #320 S/7X #330
PROGRAMMING LANGUAGES AND DEVELOPMENT TOOLS:			
Vectra GW BASIC Interpreter	45952A	3.11	

*Uses HP Touch
†Corporate Site Licensing also available

Name	HP Product Number	Version	Special Requirements
SHARED RESOURCES:			
AdvancePrint	★32583F	For use with HP 3000	
SPREADSHEETS:			
Lotus 1-2-3	★68340F	2.01	
UTILITIES:			
HP PLC PAK	33406B		
LaserControl 100***	35190J	Rev. 3	
Laserplotter	35188A		
WORD PROCESSING:			
AdvanceWrite Plus†	★27546F	F.02.00	
Executive MemoMaker*†	★68330F	A.03.00	
PRINTER UTILITIES:			
iPrint	35188D		
Jetplotter	35190P		
OFFICE SOFTWARE PACKS:			
HP Vectra PC Office Professional Pack	68300F		
HP Vectra PC Office Assistant Pack	68301F		
HP Vectra PC Office Entry Pack	★68306F		
OPERATING SYSTEM:			
Microsoft MS-DOS 3.3**			
5¼-inch media	45951D		
3½-inch media	45951E		

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*Uses HP Touch
**MS-DOS products are not supported on non-HP personal computers
***Manufacturer Supported
†Corporate Site Licensing also available

HP Portable/Portable PLUS Software Available from HP*

Ron Avignone

To determine which U.S. products are recommended for use with localized computers, check with your dealer or HP office.

Name	HP Product Number	Portable	Portable Plus
COMMUNICATIONS:			
REFLECTION 1 (ROM)	82863K Opt. 400		●
YTerm	82867K Opt. 630		●
AdvanceMail (ROM)	82870K Opt. 400		●
DATA BASE MANAGEMENT:			
Executive Card Manager (ROM)	45555K Opt. 400		●
PROGRAMMING LANGUAGES AND DEVELOPMENT TOOLS:			
BASIC by Microsoft	45445D	●	
BASIC by Microsoft (ROM)	82862K Opt. 400		●
Compiled BASIC by Microsoft	45446D	●	●
FORTRAN by Microsoft	45449D	●	●
GW-BASIC by Microsoft	45450D	●	●
Pascal by Microsoft	45447D	●	●
Programmer's Tools	45419C	●	●
Technical Reference Manual	45559K		●
WORD PROCESSING:			
Microsoft SPELL	45556D	●	●
Microsoft WORD	45474D	●	
Microsoft WORD (ROM)	45549K Opt. 400		●
MultiMate (ROM)	45554K Opt. 400		●

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*For HP Portable Vectra CS software see "U.S. Vectra Family PC Software" elsewhere in the green pages.

Asian HP Vectra Software Available from HP

Jenny Chiang

For Asian countries only:

Name	HP Product Number	Special Requirements
COMMUNICATIONS:		
Japanese AdvanceLink 2392	68333WJ	
Traditional Chinese AdvanceLink 2392	68333W Opt. ZAA	Minimum 384K Memory
Korean AdvanceLink 2392	68333W Opt. ZAB	Minimum 384K Memory
SPREADSHEETS:		
Japanese Executive Spreadsheet	68332WJ	
Traditional Chinese Executive Spreadsheet	68332W Opt. ZAA	Minimum 384K Memory
Korean Executive Spreadsheet	68332W Opt. ZAB	
WORD PROCESSING:		
Traditional Chinese Executive MemoMaker	68330W Opt. ZAA	Minimum 384K Memory
Korean Executive MemoMaker	68330W Opt. ZAB	
GRAPHICS:		
Asian Drawing Gallery	68351W	
Asian Drawing Gallery English Extension	68351W Opt. ZAN	
Traditional Chinese Drawing Gallery Fonts (Taiwan version)	79308A Opt. ZAA	
Asian Drawing Gallery Korean Extension	68351W Opt. ZAB	
Korean Drawing Gallery Fonts	79308A Opt. ZAB	
Asian Graphics Gallery (Taiwan version)	68352W Opt. ZAA	

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Localized HP 150/Touchscreen Software Available from HP

Harry Cruickshank

Here is a summary of the software that has been localized for the HP 150/Touchscreen. To order contact your local dealer (for some products) or sales representative. Some products may not be available or may not be supported in all countries.

Name	HP Product Number	Country	Revision
AdvanceLink	45431AD	Germany	A.04.00
AdvanceMail/150	27534AD	Germany	A.01.02
AdvanceMail/150	27534AE	Spain	A.01.02
AdvanceMail/150	27534AF	France	A.01.02
AdvanceMail/150	27534AH	Netherlands	A.01.02
AdvanceMail/150	27534AN	Norway	A.01.02
AdvanceMail/150	27534AX	Finland	A.01.02
AdvanceMail/150	27534AY	Denmark	A.01.02
AdvanceMail/150	27534AZ	Italy	A.01.02
Charting Gallery	45513AD	Germany	B.02.00
Charting Gallery	45513AF	France	B.02.00
Drawing Gallery	45411AD	Germany	A.02.01
Drawing Gallery	45411AF	France	A.02.01
Exec.Card Manager	45421AD	Germany	A.02.01
Exec.Card Manager	45421AZ	Italy	A.02.01
ExecuDesk	45444AD	Germany	A.02.00
ExecuDesk	45444AE	Spain	A.02.00
ExecuDesk	45444AF	France	A.02.00
ExecuDesk	45444AS	Sweden	A.02.00
ExecuDesk	45444AZ	Italy	A.02.00
ExecuDesk	45444AX	Finland	A.02.00
Executive MemoMaker	45418AD	Germany	C.02.00
Executive MemoMaker	45418AF	France	C.02.00
Executive MemoMaker	45418AX	Finland	C.02.00
Executive MemoMaker	45418AZ	Italy	C.02.00
Gallery Collection	45437AD	Germany	B.02.00
Gallery Collection	45437AF	France	B.02.00
Gallery Collection	45437AX	Finland	B.02.00
Gallery Collection	45437AZ	Italy	B.02.00
Gallery Pic.Lib. VII	45433AF	France	A.01.00

Name	HP Product Number	Country	Revision
HP Access	36898AD	Germany	A.01.01
HPMessage	36568DA	Germany	DA.00.01
HPWord	27505AB	U.K.	A.02.00
HPWord	27505AC	Canada	A.02.01
HPWord	27505AD	Germany	A.02.01
HPWord	27505AF	France	A.02.01
HPWord	27505AH	Netherlands	A.02.01
HPWord	27505AN	Norway	A.02.01
HPWord	27505AX	Finland	A.02.01
HPWord	27505AY	Denmark	A.02.01
HPWord Corp Lic.	27505QB	U.K.	A.02.00
HPWord Disc Pack	27505SB	U.K.	A.02.00
HPWord Doc Pack	27505TB	U.K.	A.02.00
MemoMaker	45420AV	Arabic	A.01.01
MemoMaker	45420AV #ZAG	Arabic/French	A.01.02
MemoMaker	45420AT	Hebrew	A.01.01
Info Access 10 User License	32596LY	Denmark	
VisiCalc II	45405AF	France	B.01.02

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Localized HP Vectra Software Available from HP

Harry Cruickshank,
Miles Mikasa

Below is a list of the HP Vectra software that has been localized. To order contact your dealer (for some products) or sales representative. Not all products are available or are supported in all countries.

Name	HP Product Number	Country	Revision
AdvanceMail	★27535FD	Germany	A.01.02
AdvanceMail	★27535FE	Spain	A.01.02
AdvanceMail	★27535FF	France	A.01.02
AdvanceMail	★27535FH	Netherlands	A.01.02
AdvanceMail	★27535FN	Norway	A.01.02
AdvanceMail	★27535FS	Sweden	A.01.02
AdvanceMail	★27535FX	Finland	A.01.02
AdvanceMail	★27535FY	Denmark	A.01.02
AdvanceMail	★27535FZ	Italy	A.01.02
AdvanceMail Site Lic.	27535LF	France	
AdvanceMail Site Lic.	27535LD/ QD/SD	Germany	
AdvanceWrite III	27508FD	Germany	F.01.02
AdvanceWrite III	27508FF	France	F.01.02
AdvanceWrite III	27508FE	Spain	F.01.03
AdvanceWrite III	27508FH	Netherlands	F.01.03
AdvanceWrite III	27508FN	Norway	F.01.03
AdvanceWrite III	27508FS	Sweden	F.01.03
AdvanceWrite III	27508FX	Finland	F.01.03
AdvanceWrite III	27508FY	Denmark	F.01.03
AdvanceWrite III	27508FZ	Italy	F.01.02
AdvanceWrite Site Lic.	27508QD	Germany	
AdvanceWrite Plus	27546FF	France	F.02.01
AdvanceWrite Plus	27546FD	Germany	F.02.01
Charting Gallery	68350FD	Germany	B.03.00
Charting Gallery	68350FF	France	B.03.00
Drawing Gallery	68351FD	Germany	B.03.00
Drawing Gallery	68351FF	France	B.03.03
Executive CardManager	★68331FZ	Italy	A.01.06
Executive CardManager	★68331FD	Germany	A.01.06
Executive CardManager	★68331FF	France	A.01.06
Executive CardManager	★68331FE	Spain	A.01.06
Executive CardManager	★68331FH	Netherlands	A.01.06
Executive CardManager	★68331FN	Norway	A.01.06
Executive CardManager	★68331FX	Finland	A.01.08
Executive CardManager Site License	68331LD/ QD/SD	Germany	
Executive Card Manager Site License	68331LF/QF/ SF	France	

★Software available in 3½-inch media. Order Option 003.

Name	HP Product Number	Country	Revision
Executive MemoMaker	★68330FE	Spain	A.03.01
Executive MemoMaker	★68330FF	France	A.03.01
Executive MemoMaker	★68330FH	Netherlands	A.03.01
Executive MemoMaker	★68330FS	Sweden	A.03.01
Executive MemoMaker	★68330FX	Finland	A.03.01
Executive MemoMaker	★68330FY	Denmark	A.03.01
Executive MemoMaker	★68330FB	Eur. English	A.03.01
Executive MemoMaker	★68330FD	Germany	A.03.01
Executive MemoMaker	★68330FN	Norway	A.03.01
Executive MemoMaker	★68330FZ	Italy	A.03.01
Executive MemoMaker Site Lic.	68330LF/QF/SF	French	
Gallery Collection	★68352FD	Germany	B.03.00
Gallery Collection	★68352FH	Netherlands	B.03.00
Gallery Collection	★68352FX	Finland	B.03.00
Gallery Collection	★68352FY	Denmark	B.03.00
Gallery Collection	★68352FZ	Italy	B.03.00
Gallery Collection	★68352FE	Spain	B.03.00
Gallery Collection	★68352FF	France	B.03.00
Gallery Collection	★68352FN	Norway	B.03.00
Gallery Collection	★68352FS	Sweden	B.03.00
Gallery Site Lic.	68352LD/QD/SD	Germany	
Gallery Site Lic.	68352LF/QF/SF	France	
HPWord Site Lic.	27536LF/QF/SF	Eur. English	
HPWord Vectra	27536FB	Eur. English	A.02.01
HPWord Vectra	27536FC	Canada	A.02.01
HPWord Vectra	27536FY	Denmark	A.02.01
HPWord Vectra	27536FX	Finland	A.02.01
HPWord Vectra	27536FD	Germany	A.02.01
HPWord Vectra	27536FF	France	A.02.01
HPWord Vectra	27536FH	Netherlands	A.02.01
HPWord Vectra	27536FN	Norway	A.02.01
HP Access Vectra	36898FD	Germany	F.01.01
Info Access 10 User License	32596LY	Denmark	
Lotus 1-2-3	★68340FB	Eur. English	2.01
Lotus 1-2-3	★68340FD	Germany	2.01
Lotus 1-2-3	★68340FE	Spain	2.00
Lotus 1-2-3	★68340FF	France	2.01
Lotus 1-2-3	★68340FS	Sweden	2.01
Lotus 1-2-3	★68340FZ	Italy	2.01

★Software available in 3½-inch media. Order Option 003.

Name	HP Product Number	Country	Revision
MS-DOS	†45951BD	Germany	3.2
MS-DOS	†45951BE	Spain	3.2
MS-DOS	†45951BF	France	3.2
MS-DOS	†45951BH	Netherlands	3.2
MS-DOS	†45951BM	Latin America	3.2
MS-DOS	†45951BN	Norway	3.2
MS-DOS	†45951BP	Switzerland-German	3.2
MS-DOS	†45951BQ	Switzerland-French	3.2
MS-DOS	†45951BS	Sweden	3.2
MS-DOS	†45951BU	United Kingdom	3.2
MS-DOS	†45951BW	Belgium	3.2
MS-DOS	†45951BX	Finland	3.2
MS-DOS	†45951BY	Denmark	3.2
MS-DOS	†45951BZ	Italy	3.2
MS-DOS	†#45951CD	Germany	3.2
MS-DOS	†#45951CE	Spain	3.2
MS-DOS	†#45951CF	France	3.2
MS-DOS	†#45951CH	Netherlands	3.2
MS-DOS	†#45951CM	Latin America	3.2
MS-DOS	†#45951CN	Norway	3.2
MS-DOS	†#45951CP	Switzerland-German	3.2
MS-DOS	†#45951CQ	Switzerland French	3.2
MS-DOS	†#45951CS	Sweden	3.2
MS-DOS	†#45951CU	United Kingdom	3.2
MS-DOS	†#45951CW	Belgium	3.2
MS-DOS	†#45951CX	Finland	3.2
MS-DOS	†#45951CY	Denmark	3.2
MS-DOS	†#45951CZ	Italy	3.2
MS-DOS	†45951DC	Canada-French	3.3
MS-DOS	†45951DD	Germany	3.3
MS-DOS	†45951DE	Spain	3.3
MS-DOS	†45951DF	France	3.3
MS-DOS	†45951DH	Netherlands	3.3
MS-DOS	†45951DM	Latin America	3.3
MS-DOS	†45951DN	Norway	3.3
MS-DOS	†45951DP	Switzerland-German	3.3

†MS-DOS products are not supported on non-HP personal computers.
#Software available in 3½-inch media. Do not specify Option 003.

Name	HP Product Number	Country	Revision
MS-DOS	†45951DQ	Switzerland-French	3.3
MS-DOS	†45951DS	Sweden	3.3
MS-DOS	†45951DU	United Kingdom	3.3
MS-DOS	†45951DW	Belgium	3.3
MS-DOS	†45951DX	Finland	3.3
MS-DOS	†45951DY	Denmark	3.3
MS-DOS	†45951DZ	Italy	3.3
MS-DOS	†#45951EC	Canada-French	3.3
MS-DOS	†#45951ED	Germany	3.3
MS-DOS	†#45951EE	Spain	3.3
MS-DOS	†#45951EF	France	3.3
MS-DOS	†#45951EH	Netherlands	3.3
MS-DOS	†#45951EM	Latin America	3.3
MS-DOS	†#45951EN	Norway	3.3
MS-DOS	†#45951EP	Switzerland-German	3.3
MS-DOS	†#45951EQ	Switzerland-French	3.3
MS-DOS	†#45951ES	Sweden	3.3
MS-DOS	†#45951EU	United Kingdom	3.3
MS-DOS	†#45951EW	Belgium	3.3
MS-DOS	†#45951EX	Finland	3.3
MS-DOS	†#45951EY	Denmark	3.3
MS-DOS	†#45951EZ	Italy	3.3
PageMaker	45964AD	Germany	
PageMaker	45964AF	France	
PageMaker	45964AE	Spain	
PageMaker	45964AZ	Italy	
PageMaker	45964AS	Sweden	
Symphony	68339FB	Eur. English	2.0

†MS-DOS products are not supported on non-HP personal computers.
#Software available in 3½-inch media. Do not specify Option 003.

Name	HP Product Number	Country	Revision
Vectra Office Assist. Bundle	68301FB	Eur. English	
Vectra Office Assist. Bundle	68301FF	France	
Vectra Office Assist. Bundle	68301FZ	Italy	
Vectra Office Assist. Bundle	68301FD	Germany	
Vectra Office Assist. Bundle	68301FH	Netherlands	
Vectra Office Assist. Bundle	68301FY	Denmark	
Vectra Office Assist. Bundle	68301FS	Sweden	
Vectra Office Assist. Bundle	68301FX	Finland	
Vectra Office Assist. Bundle	68301FE	Spain	
Vectra Office Assist. Bundle	68301FN	Norway	
Vectra Office Entry Bundle	★68306FB	Eur. English	
Vectra Office Entry Bundle	★68306FD	Germany	
Vectra Office Entry Bundle	★68306FE	Spain	
Vectra Office Entry Bundle	★68306FF	France	
Vectra Office Entry Bundle	★68306FH	Netherlands	
Vectra Office Entry Bundle	★68306FN	Norway	
Vectra Office Entry Bundle	★68306FS	Sweden	
Vectra Office Entry Bundle	★68306FX	Finland	
Vectra Office Entry Bundle	★68306FY	Denmark	
Vectra Office Entry Bundle	68306FZ	Italy	
Vectra Office Prof. Bundle	68300FB	Eur. English	
Vectra Office Prof. Bundle	68300FF	France	
Vectra Office Prof. Bundle	68300FZ	Italy	
Vectra Office Prof. Bundle	68300FD	Germany	
Vectra Office Prof. Bundle	68300FH	Netherlands	
Vectra Office Prof. Bundle	68300FY	Denmark	
Vectra Office Prof. Bundle	68300FS	Sweden	
Vectra Office Prof. Bundle	68300FX	Finland	
Vectra Office Prof. Bundle	68300FE	Spain	
Vectra Office Prof. Bundle	68300FN	Norway	

□

★Software available in 3½-inch media. Order Option 003.

Localized Software Exchange Kits—Upgrades

Harry Cruickshank

When major features are added to a software product, you can order a Software Exchange Kit at a low cost—"trading in" your older version for one with the latest capabilities and documentation.

This section lists the localized software exchange kits available for the Touchscreen/150 and the HP Vectra PC. These kits contain the latest software and any manual updates issued since the original release. **Exchange kits are provided at a nominal charge.** You return your original master disc as proof of purchase and continue operating as usual with your work copy of the software.

Ordering

To order, call HP DIRECT. For the appropriate phone number for your country, see "How to Order" in the green pages of this issue.

For each kit ordered, along with your payment submit one corresponding original master disc. This is the disc with the HP software product number and description printed on the label. **Be sure to make working copies before sending your master disc.**

Product	Country	Version	Order HP Part #
Touchscreen/150 Upgrade Kits			
HPWord/PC	France	A.02.01	27505-60010
HPWord/PC	Norway	A.02.01	27505-60011
HPWord/PC	Germany	A.02.01	27505-60012
HPWord/PC	Denmark	A.02.01	27505-60015
HPWord/PC	Finland	A.02.01	27505-60013
HPWord/PC	Netherlands	A.02.01	27505-60014
HP Vectra PC Upgrade Kits			
Executive MemoMaker	France	A.03.01	68330-60011
Executive MemoMaker	Spain	A.03.01	68330-60010
Executive MemoMaker	Finland	A.03.01	68330-60015
Executive MemoMaker	Italy	A.03.01	68330-60017
Executive MemoMaker	Norway	A.03.01	68330-60013
Executive MemoMaker	Germany	A.03.01	68330-60009
Executive MemoMaker	Netherlands	A.03.01	68330-60012
Executive MemoMaker	Europe	A.03.01	68330-60008

Product	Country	Version	Order HP Part #
Gallery Collection	Spain	B.03.00	68352-60006
Gallery Collection	Germany	B.03.00	68352-60005
Gallery Collection	Italy	B.03.00	68352-60013
Gallery Collection	Finland	B.03.00	68352-60011
Gallery Collection	France	B.03.00	68352-60007
Gallery Collection	Sweden	B.03.00	68352-60010
Gallery Collection	Denmark	B.03.00	68352-60012
Gallery Collection	Netherlands	B.03.00	68352-60008
HPWord/PC	France	A.02.01	27536-60002
HPWord/PC	Norway	A.02.01	27536-60003
HPWord/PC	Germany	A.02.01	27536-60004
HPWord/PC	Denmark	A.02.01	27536-60007
HPWord/PC	Finland	A.02.01	27536-60005
HPWord/PC	Netherlands	A.02.01	27536-60006

□

Replacement Media for Discontinued Software

We are committed to sustain support for Hewlett-Packard products well after technology advances and market demand cause us to discontinue offering a product for sale.

It is HP corporate policy to ensure availability of parts and full support services for your computer for at least five years beyond discontinuance. Specifically, this means:

- Replacement Media Exchange Kits available for five years from date of last HP shipment for each product in the table below.

  See the Software Exchange Kits article in this issue for information on the Kits.
- Availability of telephone assistance through Hewlett-Packard Help Line Response Centers.
- Continuing coverage in this magazine—the *HP PC Communicator.*

Product Name	Touchscreen/150: HP Product #	Superseded by:
ACCOUNTING:		
BPI General Accounting	45455A	None
BPI Accounts Receivable	45456A	None
BPI Accounts Payable	45457A	None
BPI Inventory Control	45460A	None
BPI Job Cost	45461A	None
BPI Payroll	45458A	None
BPI Personal Accounting	45459A	None
COMMUNICATIONS:		
Dow Jones Spreadsheet	45511D	None
PFS:File and Report	45488A	None
Transend COMplete	45414A	Available from Transend Corp.
DATABASES:		
Condor 1	45415A	Available from Condor Corp.
Condor 1 to 3 Upgrade	45417A	Available from Condor Corp.
Condor 3	45416A	Available from Condor Corp.
dBASE II/150	45468A	dBASE II—45468D
DSN/Link—U.S. English	45425A	AdvanceLink/150—45431A
ECM Templates	45441D	Now included with Executive Card Manager

Touchscreen/150:

Product Name	HP Product #	Superseded by:
Personal Card File/150	45422A	Executive Card Manager—45421A
R:Base 4000	45545A	R:Base 5000—45563A
GRAPHICS:		
Charting Gallery/Executive MemoMaker Bundle	45440A	Sold separately: Charting Gallery—45513A and/or Executive MemoMaker—45418A
Charting Gallery	45513A	Graphics Gallery Collection—45437A
Drawing Gallery	45411A	Graphics Gallery Collection—45437A
HPDraw Figures Portfolio	45571A	None
Office Activities Portfolio	45568A	None
Business Mgmt. Portfolio	45570A	None
Chemical/PetroChemical Portfolio	45669A	None
Graphplan by Chang Labs	45467A	Available from Chang Labs
Graphwriter Basic Set	45484A	None
PFS: Graph	45490A	None
Series 100 Graphics—U.S.	45410A	Charting Gallery—45513A
INTEGRATED SOLUTIONS:		
ExecuDesk System	45442A	ExecuDesk sold separately—45444A
ExecuDesk System	45444A	None
Symphony from Lotus	45498A	None
SPREADSHEETS:		
Context MBA/150	45481A	None
Financial Calculator	45423A	None
MicroPlan	45465A	Available from Chang Labs
MicroPlan Consolidation Module	45466A	Available from Chang Labs
Microsoft Multiplan/150	45473A	None
Microsoft Multiplan	45473D	None
VisiCalc Deluxe	45405A	None
VisiCalc/150—U.S. English	45405A	None

Product Name	HP Product #	Superseded by:
WORD PROCESSING:		
MemoMaker/150—U.S. English Touchscreen	45420A	Executive MemoMaker/150—45418A
PFS: Write	45489A	None
Microsoft Spell	45556D	Included in Microsoft Word (45474D)
WordStar/150—U.S. English	45400A	WordStar—Professional—45427D
MailMerge—U.S. English	45401A	Included in WordStar Professional—45427D
SpellStar	45402A	SpellStar has been superseded by CorrectStar which is included in WordStar Professional—45427D. An Upgrade kit is available from CorrectStar to SpellStar for users with a dual single-sided disc drive.
WordStar/MailMerge/SpellStar Combo	45404A	Superseded by WordStar Professional—45427D.
WordStar	45400D	Included in WordStar Professional (45427D)
WordStar Professional Options	45429D	

HP Vectra PC and/or IBM PC/XT/AT:

Product Name	HP Product #	Superseded by:
DATA COMMUNICATIONS:		
AdvanceLink	45431E	AdvanceLink—68333F
Monitor/IBM PC	45439A	AdvanceLink—68333F
DATABASES:		
ECM Templates	68335F	Now included with Executive Card Manager
Personal Card File	45422E	Executive Card Manager—68331F
R:Base System V	68328F	Available from Microrim, Inc.
INTEGRATED SOLUTIONS:		
Symphony from Lotus	68339F	Available from Lotus Development Corp.
WORD PROCESSING:		
Memomaker/IBM PC	45420E	Executive Memomaker—68330F
WordStar	68345F	Available from MicroPro, Inc.
WordStar Professional	68346F	Available from MicroPro, Inc.
WordStar 2000	68341F	Available from MicroPro, Inc.
WordStar 2000 PLUS	68342F	Available from MicroPro, Inc.
MultiMate	68338F	Available from MultiMate International Corp.
MultiMate Advantage	68343F	Available from MultiMate International Corp.
SPREADSHEETS:		
Executive Spreadsheet	68332F	

The Portable or the Portable Plus:

Product Name	HP Product #	Superseded by:
SPREADSHEETS:		
Lotus 1-2-3 Release 1A	45548K #400	45539K #400 (1-2-3 ver. 2.01)

□

Here is a list of the most popular HP PC supplies and accessories.

A full list of HP computer supplies matched to your system for optimum performance appears in the *HP Computer User's Catalog*.

For ordering information—or to obtain a copy of the *User's Catalog*—refer to the "How To Order" section in this Current Information section.

For Computers

■ **HP Vectra PC**

24542D	Parallel printer cable for the Vectra PC (2 meters)
24542G	Serial printer/plotter cable for the Vectra PC (3 meters)
24542H	Serial plotter cable for Vectra PC to 7550 plotter (3 meters)
24542M	U.S./European modem cable (3 meters) for the Vectra PC
35178A	Vectra PC three-piece carrying case
35184E	Deskplotter software (allows DeskJet to do plotter graphics)
35188A	LaserPlotter software (allows laser to do plotter graphics)
35190J	LaserControl software (print Lotus sideways)
35190P	Jetplotter software (allows InkJet printers to emulate plotters)
45986A	Security System Lock
46296A	Backup Power Supply
92165A	2 plug surge suppressor
92165B	4 plug surge suppressor
92165C	6 plug surge suppressor
92165R	RS-232C surge protector
92166A	Vectra PC keyboard park
92171X	ThinkJet printer stand for top of display
92190A	5.25-inch flexible discs, 360 KB (formatted capacity), double-sided, unformatted (box of 10 discs)
92190X	High-capacity 5.25-inch flexible discs, 1.2 MB (formatted capacity), for use on the Vectra PC's high capacity internal disc drive, double-sided, unformatted (box of 10 discs)
92192A	3.5-inch micro flex discs, 710/720 KB, (formatted capacity) double-sided (box of 10)
92192T	205' long formatted/certified mini data cartridge, 40 MB formatted (box of 5)
92192X	3.5-inch micro flex discs, high-density 1.42/1.44 MB (formatted capacity), double sided (box of 10)
92208A	Mobile PC Centre
92259A	Vectra PC, Vectra ES dust cover for monochrome monitor and keyboard
92259B	Vectra PC, Vectra ES dust cover for color/EGA monitor and keyboard
92259K	Vectra CS/ES/RS dust cover for monochrome monitor and C1405A keyboard

92259L	Vectra CS/ES/RS dust cover for EGA/VGA color monitor and C1405A keyboard
92259M	Vectra CS/ES/RS dust cover for monochrome VGA monitor and C1405A keyboard
92261R	ThinkJet paper catcher (use with 92171X printer stand)
92268A	4 metre StarLAN cable. 8-pin connectored/4 twisted pair unshielded cable with RJ45 connectors
92268B	8 metre StarLAN cable. 8-pin connectored/4 twisted pair unshielded cable with RJ45 connectors
92268C	16 metre StarLAN cable. 8-pin connectored/4 twisted pair unshielded cable with RJ45 connectors
92268D	32 metre StarLAN cable. 8-pin connectored/4 twisted pair shielded cable with RJ45 connectors

For Disc Drives

■ **HP 9122C and 9153C 3.5-inch Disc Drives**

92191E	FlexFiles for 3.5-inch discs (Pkg. of 5 FlexFiles—each unit holds 10 discs)
92191F	Portable album file for 3.5-inch discs (capacity 20 discs)
92191M	Micro carrying case pack for 3.5-inch discs (Pkg. of 3 cases—each case holds 5 discs)
92191P	Hanging file pages for 3.5-inch discs (capacity 40 discs)
92191Q	Compact file for 3.5-inch discs (capacity 40 discs)
92191T	Micro disc case for 3.5-inch discs (capacity 10 discs)
92192A	3.5-inch micro flexible discs—double-sided (box of 10)
92192N	3.5-inch micro flexible discs—double-sided (box of 100)
92192X	3.5-inch high density microflexible discs (box of 10)

■ **HP 45812A Internal 1.2 MB 5.25-inch Disc Drive for the Vectra PC**

92190X	5.25-inch high capacity flexible disc (box of 10)
92194A	Compact file for 5.25-inch discs (capacity 60 discs)
92194E	FlexFiles for 5.25-inch discs (Pkg. of 5 FlexFiles—each unit holds 10 discs)
92194G	Portable album file for 5.25-inch discs (capacity 20 discs)
92194P	Hanging file pages for 5.25-inch discs (Pkg. of 10—capacity 20 discs)

■ **HP 45813A Internal 1.44 MB 3.5-inch Disc Drive for the Vectra PC**

92191E	FlexFiles for 3.5-inch discs (Pkg. of 5 FlexFiles—each unit holds 10 discs)
92191F	Portable album file for 3.5-inch discs (capacity 20 discs)
92191M	Micro carrying case pack for 3.5-inch discs (Pkg. of 3 cases—each case holds 5 discs)
92191P	Hanging file pages for 3.5-inch discs (capacity 40 discs)
92191Q	Compact file for 3.5-inch discs (capacity 40 discs)
92191T	Micro disc case for 3.5-inch discs (capacity 10 discs)
92192A	3.5-inch micro flexible discs—double-sided (box of 10)
92192N	3.5-inch micro flexible discs—double-sided (box of 100)
92192X	3.5-inch high density microflexible discs (box of 10)

■ **HP D1671A Cartridge Tape Drive**

92192Q	Storage tray for 92192T tapes (holds up to 18 tapes)
92192T	205′ formatted/certified mini data cartridge, 40 MB formatted (box of 5)

For Printers

■ **HP 3630A PaintJet Color Graphics Printer**

17301A	PaintJet softfonts for Microsoft Windows
35190P	Jetplotter software (allows PaintJet to emulate plotter)
51606A	Black ink print cartridge
51606C	Color ink (cyan, magenta, yellow) print cartridge
51630P	Z-fold PaintJet printer paper (250 sheets)
51630Q	PaintJet transparency film (50 sheets with sleeves)
51630R	Z-fold PaintJet paper, A4 size (250 sheets)
51630S	PaintJet transparency film, A4 size (250 sheets)
51630Y	Cut-sheet PaintJet printer paper (250 sheets)
51630Z	Cutsheet PaintJet paper, A4 size (250 sheets)
92261G	Paper catcher for 92269A printer stand
92250Z	PaintJet printer dust cover
92269A	Desktop stand for PaintJet Printer

■ **HP 2225A/B/C/D ThinkJet Printer**

35178C	Carrying Case
51604A	Plain paper ink cartridge (black)
51605B	Jet Paper ink cartridge (blue)
51605G	Jet Paper ink cartridge (green)
51605R	Jet Paper ink cartridge (red)
35190P	Jetplotter software (allows ThinkJet Printer to emulate plotter)
51630A	Fan-fold Jet Paper (500 sheets/box)
51630J	Cut-sheet Jet Paper (500 sheets/box)
51630L	Pressure sensitive ink jet labels (2 across, 2000/box)
92171X	Terminal top ThinkJet printer stand for 239X series terminals
92250V	Dust cover
92261A	Jet Paper ink cartridge (black)
92261D	Accessory Kit (2 Jet Paper cartridges, 500 sheets fanfold paper, 500 sheets cut paper, 1 dust cover, and 1 printer stand)
92261N	Fan-folded Jet Paper (five 500-sheet packs)
92261R	Paper catcher for use with 92261S and 92171X stands
92261S	Desktop ThinkJet printer stand

■ **HP 2227A/B QuietJet/QuietJet Plus**

51604A	Plain paper ink cartridge (black)
51605B	Jet Paper ink cartridge (blue)
51605G	Jet Paper ink cartridge (green)
51605R	Jet Paper ink cartridge (red)
51630B	Z-fold wide Jet Paper for QuietJet Plus (500 sheets)
51630D	Z-fold wide Jet Paper for QuietJet plus (2500 sheets)
92250X	QuietJet dust cover
92250W	QuietJet Plus dust cover
92261A	Jet Paper ink cartridge (black)
92261G	Paper catcher for 92261T/U printer stands
92261P	QuietJet Plus accessory kit (1 each black, blue, green, and red Jet Paper cartridges, printer stand, dust cover, printer paper)

92261T	QuietJet Plus printer stand
92261U	QuietJet printer stand
35190P	Jetplotter software (allows QuietJet to emulate plotter)

■ **HP 2235A/B/C/D RuggedWriter Printer**

35190R	Matrix Plotter software (allows RuggedWriter to do graphics at 180 x 360 D.P.I.)
92156S	Ribbon cartridges (box of 3 cartridges)
92166A	Desktop printer stand
92157A	Printer paper, fan-folded (box of 2400 sheets)
92157C	Printer paper, microperforated, fan-folded (box of 2400 sheets)

■ **HP 2276A DeskJet Printer**

22707A	128K RAM cartridge for use with soft fonts
22707E	Epson FX-80 printer emulation cartridge
22708A	TmsRmn/Helv soft font (requires additional 128K or 256K RAM, depending on application)
35184E	Deskplotter software (allows DeskJet to do graphics by emulating plotters)
51608A	Black print cartridge
92250R	DeskJet printer dust cover

Font Cartridges for HP 2276A DeskJet Printer:

22706A	Courier
22706B	Prestige Elite
22706C	Letter Gothic
22706D	TmsRmn 8 & 10 Point
22706E	TmsRmn 12 Point
22706F	TmsRmn 14 Point
22706G	Helv 8 & 10 Point
22706H	Helv 12 Point
22706J	Helv 14 Point
22706M*	Presentations
22706P*	TmsRmn ASCII
22706Q*	Helv ASCII
22707K	Landscape upgrade cartridge
22707L	Landscape fonts cartridge (must use with 22707K only)

*This font cartridge contains ASCII characters only and may not be suitable for use in countries requiring non-English characters and symbols.

■ **HP 33440A LaserJet Series II Printer**

35188A	LaserPlotter software (allows LaserJets to do graphics by emulating plotters)
35190J	LaserControl software (to drive LaserJet)
92157K	1" labels (other sizes also available)
92211B	Mobile printer cabinet
92259G	Dust cover
92285J	Transparencies
92295A	Toner (EP-s) cartridge
92295B	8.5" x 11" paper tray (letter/standard size)
92295C	8.5" x 14" paper tray (legal size)
92295D	A4 paper tray (metric size)
92295E	7.25" x 10.5" paper tray (executive size)

■ **HP LaserJet/LaserJet Series II Printer Fonts**

92286A	Plug-in type-font cartridge (Courier and Line Printer, compressed)
92286B	Plug-in type-font cartridge (Proportional Spacing)
92286C	Plug-in type-font cartridge (International Courier)
92286D	Plug-in type-font cartridge (Prestige Elite)
92286E	Plug-in type-font cartridge (Letter Gothic)
92286F	Plug-in type-font cartridge (Proportional Spacing II)
92286G	Plug-in type-font cartridge (Legal Elite)
92286H	Plug-in type-font cartridge (Legal Courier)
92286J	Plug-in type-font cartridge (Math Elite)
92286L	Plug-in type-font cartridge (Courier and Line Printer)
92286M	Plug-in type-font cartridge (Prestige Elite P + L)
92286N	Plug-in type-font cartridge (Letter Gothic P + L)
92286P	Plug-in type-font cartridge (TMS Rmn P + L)
92286Q	Plug-in type-font cartridge (Memo 1)
92286R	Plug-in type-font cartridge (Presentations 1)
92286T	Plug-in type-font cartridge (Tax)
92286U	Plug-in type-font cartridge (Forms, "portrait"-style)
92286V	Plug-in type-font cartridge (Forms,"landscape"-style)
92286X	Plug-in type-font cartridge (EAN/UPC/OCR-B)
92286Y	Plug-in type-font cartridge (PC Courier 1)
92286Z	Plug-in type-font cartridge (Microsoft 1)

HP Soft Fonts for MS-DOS—5.25-inch discs (HP Vectra/IBM/IBM compatibles)

33412AC	Soft font (TMS Rmn/Helv Base Set—USASCII)
33412AD	Soft font (TMS Rmn/Helv Base Set—ROMAN 8)
33412AF	Soft font (TMS Rmn/Helv Supplemental—ROMAN 8)
33412DA	Soft font (Letter Gothic Base Set)
33412EA	Soft font (Prestige Elite Family)
33412RA	Soft font (Garamond)
33412SA	Soft font (Century Schoolbook)
33412TA	Soft font (Zaph Humanist)
33412UA	Soft font (Headline Typeface, Collection 1)
35188A	LaserPlotter software (allows full page graphics output by emulating plotters)
35190J	LaserControl

For HP ColorPro, 7470A, 7475A and 7550A Plotters

- **Non-Glossy Plotter Paper**

	Size/Sheets
17800P	A/50
17801P	A/250
17802P	A4/50
17803P	A4/250
17804P	B/50
17805P	B/250
17806P	A3/50
17807P	A3/250

- **Glossy Plotter Paper**

	Size/Sheets
17900G	A/100
17901G	A4/100
17902G	B/100
17903G	A3/100

- **Transparency Plotter Film**

	Size/Sheets
17700T	A/50 (7440/70)
17701T	A4/50 (7440/70)
17702T	A/50 (7475 + others)
17703T	A4/50 (7475 + others)

- **Fiber-Tip Paper Pens**

.3mm	.7mm	Single-color (5 pens/pkg)
17825P	17826P	Black
17827P	17828P	Green
17829P	—	Aqua
17831P	17832P	Blue
17833P	—	Violet
17835P	—	Brown
17837P	—	Yellow
17839P	—	Orange
17841P	17842P	Red
17843P	—	Red-Violet
		Multi-color
17845P	17846P	Std Assort
17847P	17848P	Cool Assort
17849P	17850P	Warm Assort

■ **Fiber-Tip Transparency Pens**

.3mm	.7mm	Single-color (5 pens/pkg)
17725T	17726T	Black
17727T	17728T	Green
17729T	—	Aqua
17731T	17732T	Blue
17733T	—	Violet
17735T	—	Brown
17737T	—	Yellow
17739T	—	Orange
17741T	17742T	Red
17743T	—	Red-Violet
		Multi-color
17745T	17746T	Std Assort
17747T	17748T	Cool Assort
17749T	17750T	Warm Assort

■ **Accessories**

07550-60210	Dust cover (7550A)
07440-60006	Dust cover (Color Pro)
07475-60010	Dust cover (7475A)
92166E	Plotter sound enclosure (for ColorPro, 7470A & 7475A plotters only)
92177V	Personal Plotter-pen organizer (for fiber-tip pens)
92177T	Plotter-pen organizer (for short pens)
92177U	Plotter-pen organizer (for tall pens)
92177W	ColorPro (7440A) graphics organizer
92177X	7475A graphics organizer
92177Y	7550 graphics organizer
92214P	Mobile support stand (7475)
92250N	Dust cover (7470A)
92269A	Desktop stand (7470A, ColorPro)

Hewlett-Packard personal business computers and their application programs are designed for ease of use and ease of learning. Classroom training courses can help first-time computer users rapidly build confidence and gain new skills in a supportive environment away from the day-to-day job.

HP-Conducted Introductory Courses

Hewlett-Packard provides training courses at HP Customer Training Centers using HP-provided equipment; they can also be taught by HP at your facility using your own systems. To order, call your HP sales and service office.

- *Getting Started—Vectra*

  This class is designed to acquaint the novice Vectra PC user with the machine's many capabilities. Topics covered include installing applications, P.A.M., MS-DOS commands, disc formatting, file management, and system configuration.

  HP 72401A (1 day)

- *Getting Started—The Portable*

  This class teaches new computer users to operate the Portable using P.A.M., to write and save a memo, and to dial an electronic information service. You will also gain an understanding of compatibility issues between desktops and The Portable.

  HP 45689A (1 day)

- *Getting Started—The Touchscreen*

  This workshop was created especially for beginners—so your first experience with your new computer will be a positive one. You'll learn how to define basic computer terms, start up the system, handle discs properly, prepare new discs, and install application software.

  HP 35036B (1 day)

  This course, or equivalent knowledge, is a prerequisite for all applications and programming training on the HP 150.

HP-Conducted Application Courses

We have structured the curriculum for maximum flexibility. You can attend whatever functional area course you want—spreadsheet analysis, word processing, data base management, or integrated software—without having to go through material you are not interested in. For further efficiency, *WordStar/150* and *Condor/150* are each divided into two modules, allowing you to choose the depth of understanding you wish to attain.

All of these classes stress hands-on work with the HP 150 during class time for maximum effectiveness.

- *Advanced Lotus 1-2-3*

  This class teaches Lotus 1-2-3 users advanced 1-2-3 features such as Data Sort, Data Query and Data Table commands, database statistical functions, keyboard macros, programming with the /X command, and advanced file commands.

  HP 05097A (1 day)

- *MultiMate*

  This class is designed for secretaries and clerks with little or no prior word processing experience. You will learn how to create, edit, format, and print documents.

  HP 51400A (1 day)

- *MS Word*

  This class is designed for business professionals, word processing specialists and clerical personnel. You will learn to create, edit, format and print documents. In addition, you will learn to create multi-columnar documents, to set up glossaries and to understand the use of windowing.

  HP 51401A (1 day)

- *AdvanceWrite Plus Course 1*

  Provides AdvanceWrite Plus users with an introduction to the basic features of AdvanceWrite Plus. Students develop expertise in creating, editing and formatting documents. Students will also be introduced to file use and directories.

  HP 27542A

- *AdvanceWrite Plus Course 2*

  Provides AdvanceWrite Plus users with the ability to use the mailmerge facility to produce standard letters, to use Wordbase Manager, to create tables of contents and indices, to use the spreadsheet feature, and to use other advanced features of AdvanceWrite Plus.

  HP 27543A

- *AdvanceWrite Plus Course 3*

  Provides AdvanceWrite Plus users with an overview & understanding of the major new product features. Students will practice the integration of graphic images into a document, using advanced formatting capabilities, and using the printing options available in AdvanceWrite Plus.

  HP 27544A

- *AdvanceWrite Plus*

  Covers the material in HP 27542A, HP 27543A and HP 27544A for DOS-compatible keyboards.

  HP 27547A

- *AdvanceWrite Plus Advanced Features*

  Covers the material in HP 27543A & HP 27544A.

  HP 27548A

- *Lotus 1-2-3*

  This introductory workshop familiarizes you with the features, worksheet, and command structure of Lotus 1-2-3. Using hands-on practice, you will learn how to create and format a spreadsheet; save a worksheet and print a report; create and use a database; and create, print, and plot a graph.

  HP 45688A (1 day)

- *VisiCalc/150*

  A solid introduction to the elements of a VisiCalc worksheet is provided in this workshop. Participants will learn to create, edit and print worksheets, identify and use 16 commands, activate the function keys, and store and load worksheets.

  HP 35125A (1 day)

- *WordStar®/150*

  The WordStar® workshop will help you get started with word processing and its many capabilities. By the end of the workshop you will know how to start WordStar, create a new document, and then edit, save and print documents.

  HP 35123B (1 day)

- *MailMerge and SpellStar/150*

  As a follow-on to WordStar, this workshop shows you how to merge files with MailMerge™ as well as proof your text using the SpellStar™ 20,000 word dictionary. In practice sessions, you will learn how to create a mailing list database and then combine this with text files to print customized letters and memos. The majority of WordStar's dot commands are explained and illustrated.

  HP 35123C (½ day)

- *WordStar/150 and MailMerge/SpellStar/150* are available as a single unit.

  HP 35123A (1½ days)

- *Condor/150 20-1 and 20-2*

  This workshop will introduce you to Condor™—an easy-to-use, yet powerful database management system. After you understand what a database system is you'll learn how to use one by designing a form for entering data, creating a simple dataset, editing information, sorting and creating simple reports, and reorganizing a dataset.

  HP 35124B (1 day)

- *Condor/150 20-3*

  The Condor 20-3 workshop will provide you with in-depth experience using Condor's advanced database management and report writing capabilities including indexing a new or existing dataset, joining unlike datasets, creating, printing and revising reports, and creating and running a help screen and command procedure.

  HP 35124C (1 day)

- *Condor/150 20-1 and 20-3* can be ordered as a single unit.

  HP 35124A (2 days)

HP Customized Training	These courses can be taught at your facility using your own systems—or training to suit your specific needs can be designed and given through HP's Personal Computer Applications Engineering Consulting Service. Contact your HP sales and service office for details.
Dealer-Conducted Courses	Many HP personal computer dealers teach similar courses or arrange for a Hewlett-Packard instructor to teach courses in your area. Contact your dealer for details.

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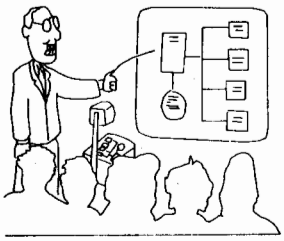
Classroom Learning Packs

Brian Egan, Roger Williams



The Classroom Learning Pack is a new concept expressly designed for the instructor of a classroom course on personal computer software. We've developed ready-to-use materials—an instructor's guide, overhead transparencies, and student activity sheets—so that you can quickly prepare for a course. And the course is easy to teach because the focus is on extensive hands-on practice with the software.

Classroom Learning Packs are offered for:

AdvanceMail (A.02.00)/Vectra and IBM PC/XT/AT includes materials for 10 students . . . . . HP 27535V

Additional Student Learners' Packs (10 pack) . . . . . HP 27535-60001

Executive Card Manager/Vectra and IBM PC/XT/AT . . . . . HP 89913F

During most of the course the students will be actually using the software and the instructor will be serving as a coach, not a lecturer.

To help you prepare for your role in leading the class, the Executive Card Manager Learning Pack includes the corresponding HP FastTrak Guide for expert users. FastTrak is self-study, modular training on such topics as installation, configuration, demonstrations, software features, and integration with other software. You'll be well prepared to answer any questions that come up during class.

Not only will the students practice with the software, they'll also practice using the documentation that accompanies the product. After they leave the class they will be able to find valuable information in the manuals when they need it.

AdvanceMail	With the AdvanceMail Customer Education Trainer's Pack you can teach users the effective use of AdvanceMail version A.02.00, HP's electronic mail system. The trainer's pack has a modular format which allows you to customize the course to your needs. The course provides guidance on selected modules and sample curricula for common training scenarios. Student Reference Cards provide seamless customization of student materials. In addition, you can personalize the course by editing the overhead slides using Graphics Gallery files supplied on disc. The pack supports an initial class of 10 students. For subsequent classes you can order Learners' Packs (product number HP 27535-60001) which comprise 10 sets of student materials.
Executive Card Manager	The Executive Card Manager Learning Pack includes lessons on creating a cardfile; adding, updating and deleting cards; finding cards; and creating reports. This course may be used for teaching Executive Card Manager on the HP Vectra PC or an IBM PC/XT/AT.
Ordering Information	To order Classroom Learning Packs and Student Learners' Packs, contact your local dealer or HP office.

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HP FastTrak, FastTrak PLUS and ExpertGuide Self-Study Packs

Linda Swett

HP FastTrak, FastTrak PLUS, and ExpertGuide are comprehensive self-study training packs for user support personnel and expert users.

If you provide support services for personal computer users in your organization, or if you need information beyond the scope of the software documentation, these self-study packs will make your job easier by helping you learn the ins and outs of the software quickly.

Topics covered include product overview, supported configurations, features and uses, demo tips, integration with other personal computer applications, installation, performance, and technical tips. The format is consistent with the software documentation to simplify the learning process. In addition, the guides are completely modular so you can learn what you want, when you want.

HP FastTrak

HP FastTrak guides are now available for the following software applications:

Executive MemoMaker (HP 89915F)
Executive Card Manager (HP 89916F)
AdvanceLink (HP 89918F)
Gallery Collection (HP 68352X)
(includes Charting and Drawing Gallery FastTraks)

Each guide covers the Touchscreen/150 and HP Vectra versions of software. FastTrak guides for Executive MemoMaker, Executive Card Manager, and Gallery Collection also include a 3½-inch and 5¼-inch disk of demonstration files.

HP Vectra Office FastTrak PLUS

The HP Vectra Office FastTrak PLUS (HP 68321F) is available to provide training on integrating, customizing, and automating your HP Vectra Office products. FastTrak PLUS contains information and labs designed to help office automation specialists who provide application level programming, training and general consulting to HP 3000 workstation users.

This self-paced course enables you to demonstrate the flow of data between applications within the Vectra Office, customize and automate this flow of data for specific user needs, and provide custom solutions, tightly integrating Vectra Office with the HP 3000 and HP DeskManager.

	The HP Vectra Office FastTrak PLUS includes product integration training on AdvanceWrite, Executive MemoMaker, AdvanceLink, AdvanceMail, Executive Card Manager, Lotus 1-2-3, Graphics Gallery, and HP DeskManager B. Included also is a data disk in 5¼-inch format that contains sample batch jobs automating various real-life scenarios used in the labs, and command files for automating and customizing Vectra 3000 and HP DeskManager B.
Windows HP ExpertGuide for Microsoft Windows	If you desire technical user information beyond the scope of the Microsoft Windows User's Guide, a Windows HP ExpertGuide is available for version A.01.03 of Windows. The Windows HP ExpertGuide for Microsoft Windows (HP 5958-7685) is a self-study reference and learning tool composed of readings, labs, examples, and quick reference information for Windows on the HP 150 and HP Vectra.
Ordering Information	To order any of these products, contact your local dealer or HP sales office.

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Vectra PC Fundamentals: A Computer-Based Tutorial

Vicki Ludwick

The First Step Toward Effective Vectra Use

Vectra PC Family Fundamentals: A Computer-Based Tutorial is a computer-based software package designed to introduce users of all Vectra PCs to the system as well as to provide more in-depth lessons for the more experienced user. This tutorial is highly interactive and its modular format permits users to learn at their own pace and at their own convenience.

This computer-based tutorial is an ideal way to come up to speed on Vectra PC basics and to obtain efficiently the solid background necessary to be a productive applications user. Upon completion of the four-to-six hour tutorial, users will have gained:

- An understanding of basic microcomputer terms and concepts;
- An understanding of how to start and stop the Vectra PC;
- Experience in the use of the keyboard;
- An understanding of the components of the computer and their functions;
- The ability to differentiate between an operating system and application software;
- The ability to use PAM to perform basic file management and directory management tasks; and
- An ability to use sixteen of the most essential MS-DOS commands.

To Order

To order Vectra PC Fundamentals, contact HP DIRECT or your sales office and request HP product number 51410B.

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If you can't wait long for answers to questions about application software and hardware configurations, you should know about HP's Personal Computer Assistance services. They give you access to experts at HP Response Centers, five days a week. Utilizing state-of-the-art telecommunications and knowledge databases, these professionals can quickly pinpoint solutions.

HP offers two Personal Computer Assistance services for the mid- to large-size company with an internal support staff.

- **Workgroup Coordinator Assistance—Business Software** provides designated staff members with unlimited telephone assistance for application software used on a variety of HP personal computers. With a response time of two hours or less, this service makes sure you receive the prompt and expert attention your business demands. You also receive a subscription to this magazine, the bi-monthly *HP PC Communicator.*
- **Workgroup Coordinator Assistance—Vectra Office** provides workgroup coordinators with unlimited telephone support, specifically for the HP Vectra office software used on HP Vectra PCs. You also receive a subscription to *HP PC Communicator.*

HP also offers support services for the small business or individual user:

- **PC User Assistance** makes the same Response Center specialists available to individual users interested in peak productivity. Unlimited telephone assistance and a two-hour response time ensure that you are getting the most from our popular software packages. The *HP PC Communicator* subscription is included with this service also.
- **HelpLine** provides you with a pay-as-you-go alternative for software support. If you don't often need assistance, this service may be right for you. You receive direct access to Response Center specialists with the same two-hour response time. Special certificates let you purchase assistance in advance or you can charge the toll-free call to your personal or company credit card. (Available U.S. and Canada only.)

Ordering Information

To order the personal computer software support that best meets your support requirements, call HP's Support Telemarketing Center at (800) 835-HPHP in the U.S., or call your local HP sales office. All contractual services must be purchased for a minimum of three months coverage. All PC software support services apply only to software classified as HP-supported. Listed below is ordering information for some of the telephone assistance products.

Telephone Assistance for Internal Support Personnel:

- Workgroup Coordinator Assistance—Business Software

Response Center caller plus one alternate	HP 99062A + D00
Each additional caller	HP 99062A + P00

- Workgroup Coordinator Assistance—Vectra Office

Response Center caller plus one alternate	HP 99090A + D00
Each additional caller	HP 99090A + P00

Telephone Assistance for the End-User:

- PC User Assistance

HP Vectra Pre-Assembled Personal Computer Systems:

HP Vectra Publisher PC	HP D1200A + E00

HP Vectra CS Personal Computers:

Vectra CS Model 10	HP D1110A + E00
Vectra CS Model 11	HP D1111A + E00
Vectra CS Model 12	HP D1112A + E00
Vectra CS Model 16	HP D1116A + E00
Vectra CS Model 20	HP D1120A + E00
Vectra CS Model 21	HP D1121A + E00
Vectra CS Model 22	HP D1122A + E00
Vectra CS Model 26	HP D1126A + E00

HP Vectra ES Personal Computers:

Vectra ES Model 10	HP D1210A + E00
Vectra ES Model 20	HP D1220A + E00
Vectra ES Model 21	HP D1221A + E00
Vectra ES Model 22	HP D1222A + E00
Vectra ES Model 26	HP D1226A + E00

HP Vectra ES/12 Personal Computers:

Vectra ES/12 Model 10	HP D1310A + E00
Vectra ES/12 Model 20	HP D1320A + E00
Vectra ES/12 Model 21	HP D1321A + E00
Vectra ES/12 Model 22	HP D1322A + E00
Vectra ES/12 Model 26	HP D1326A + E00
Vectra ES/12 Model 40	HP D1340A + E00
Vectra ES/12 Model 41	HP D1341A + E00
Vectra ES/12 Model 42	HP D1342A + E00
Vectra ES/12 Model 46	HP D1346A + E00

HP Vectra RS/16 Personal Computers:

HP Vectra RS/16 Model 40	HP D1500A + E00
HP Vectra RS/16 Model 100	HP D1502A + E00
HP Vectra RS/16 Model 106	HP D1501A + E00

HP Vectra RS/20 Personal Computers:

HP Vectra RS/20 Model 40	HP D1600A + E00
HP Vectra RS/20 Model 100	HP D1602A + E00
HP Vectra RS/20 Model 106	HP D1601A + E00
HP Vectra RS/20 Model 150	HP D1603A + E00
HP Vectra RS/20 Model 300	HP D1604A + E00
HP Vectra RS/20 Power User	HP D1606A + E00

HP Portable Vectra CS Personal Computers:

Portable Vectra CS	HP D1001A + E00
Portable Vectra CS 20	HP D1009A + E00

HP Portable Plus Personal Computers:

Portable PLUS	HP 45711E + E00

HP Vectra LS/12 Laptop Personal Computer:

HP Vectra LS/12	HP D1044A + E00
HP Vectra LS/12	HP D1024A + E00

The Touchscreen Personal Computers:

Touchscreen II	HP 45851A + E00

- HelpLine*:
  Individual support calls may be charged to personal or company credit cards by calling (800) 858-8857. In addition, users may prepay for five calls by purchasing HelpLineCall Certificate Packs (HP 35159A) from HP DIRECT at (800) 538-8787.

*HelpLine services are available in the U.S. and Canada only.

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Manuals:
HP 150/Touchscreen and HP Vectra PC

Dave Carella

The following is a list of manuals which can be ordered for the HP 150/Touchscreen PC and the HP Vectra PC family. To order, refer to the "How to Order" section in the "green pages" of this issue.

■ **HP Touchscreen/150**

45624A	MS-DOS User's Guide for HP 150 (Includes binder and manuals 45624-90001, 90005, and 90006)
45625-90002	Technical Reference Manual Supplement
45625A	HP 150 Technical Reference Manual (Includes 45625-90001 and 45625-90002)
*45626-90003	More About Connecting HP Printers, Plotters, and Disc Drives
*45626-90004	Using Your HP Touchscreen Personal Computer
*45626-90005	Using Your HP Touchscreen Personal Computer as a Terminal
45643-90002	45643A Extended I/O Accessory Card Service Manual
*45644-90002	45644A Etherlink/150 Accessory Service Manual
45847-60017	Using Your HP Touchscreen II as a Personal Computer Manual
45847-90001	Getting Started With Your HP Touchscreen II as a Personal Computer (150C)
45847-90044	Getting Started With Your HP Touchscreen II Personal Computer Manual
45847-90051	New Index—Using Your HP Touchscreen II Personal Computer
45847-90061	Using Your HP Touchscreen II Personal Computer Update
45848-60001	Using Your Touchscreen II as a Terminal (150C)
45848-90015	Using Your Touchscreen II as a Terminal Supplement
45849-60202	MS-DOS User's Guide for the HP 150/Touchscreen
45849-60204	HP 150 Programmer's Reference Manual
45849-90002	Touchscreen II Service Manual
45849-90046	Touchscreen II Personal Computer Operational Upgrade Instructions
45890-90002	HP 150 Expanded Memory Board Users and Installation Manual

*These manuals are in support life. Customers may not receive original format.

■ HP Vectra PC Family

45897-90001	Vectra Hard Disc Multi Voluming Instruction Guide
45911-90002	45911A Graphics Tablet User's Manual
45918A	HP-HIL Technical Reference Manual
45932-90001	See Kit D1100-90001
*45934-90001	Setting Up Vectra
*45934-90002	Connecting Peripherals To Vectra
*45934-90004	Vectra Installing Internal Options Chart
*45935-90059	Vectra CE Handbook
45945-60031	Vectra System BIOS Technical Reference Manual Kit (Contains manual 45945-90012 and binder)
45945-90011	See Kit 5061-8982
45945-90012	See Kit 45945-60031
45951-90066	MS-DOS 3.2 Condensed Reference Guide
5061-8971	MS-DOS 3.2 Programmer's Reference
5061-8982	HP Vectra ES Hardware Technical Reference Manual Kit (Contains manual 45945-90011 and binder)
5061-8983	HP Vectra Accessories Technical Reference Manual Kit (Contains manual 5959-6759 and binder)
5061-8986	Vectra RS Technical Reference Manual Kit (Contains manual 5959-2654 and binder)
5958-7685	HP Expert Guide for Microsoft Windows
5959-2650	HP Vectra RS Personal Computer Service Manual
5959-2654	See Kit 5061-8986
5959-6759	See Kit 5061-8983
D1001-90029	Setting Up the Portable Vectra CS Literature Pak
D1100-90001	HP Vectra CS PC Technical Reference Manual Kit (Contains manual 45932-90001 and binder)
D1135-90002	Vectra CS PC Service Manual
D1310-90001	HP Vectra ES Personal Computer Service Manual
D1350-90104	Vectra ES Series Set Up and HP Mode Configuration Bulletin
D1410-90001	HP Vectra QS Service Manual
D1410-90002	HP Vectra QS Hardware Technical Reference Manual

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*These manuals are in support life. Customers may not receive original format.

Software Exchange Kits— Upgrades, Updates, and Replacements for Damaged Discs

Robert Millier

This section lists the software exchange kits available for The Portable, HP 120/125, Touchscreen/150, and HP Vectra PC. These kits contain the latest software and any manual updates issued since the original release. **Exchange kits are provided at a nominal charge.** You return your original master disc as proof of purchase and continue operating as usual with your work copy of the software.

Software Exchange Kits are provided for several different purposes:

- **Updates.** Software is revised to add new features, to work with new peripherals, or to correct problems. You can update your program and manuals at a nominal cost by ordering the appropriate Software Exchange Kit.
- **Upgrades.** When major features are added to a software product, you can order a Software Exchange Kit at a low cost—"trading in" your older version for one with the latest capabilities and documentation.
- **Media Replacement.** The master-copy/work-copy technique used is designed to minimize the risk of damage to your master software due to handling or human error. If this happens, Software Exchange Kits are available at a nominal charge. If the product has been updated since your original purchase, the Exchange Kit contains the latest version and any manual updates issued since the original release.

Ordering

To order:

- In the U.S., Software Exchange Kits are available by mail from HP's Direct Marketing Division, using the form provided at the end of this article.
- Outside the U.S., contact your dealer or HP sales office for details.

For each kit ordered, along with your payment submit one corresponding original master disc. This is the disc with the HP software product number and description printed on the label. **Be sure to make working copies before sending your master disc.**

To determine the price for a kit, contact your dealer or HP office—or call the HP telephone order number for your country. (See the "How to Order" section later in this Current Information insert.) HP cannot accept orders submitted without the correct master disc.

Refer to the tables on the next pages for Exchange Kit part numbers.

HP Internal Orders

For HP Internal Orders of Software Exchange Kits, return the original master discs to:

Software Administrator, Building 78/3
or Hewlett-Packard
Attn: Software Administrator
P.O. Box 60008
Sunnyvale, CA 94088

Reference your HP Internal Order number on the package.

Replacement Media for Discontinued Software

We are committed to sustain support for Hewlett-Packard products well after technology advances and market demand cause us to discontinue offering a product for sale.

It is HP corporate policy to ensure availability of parts and full support services for your computer for at least five years beyond discontinuance. Specifically, this means:

- Replacement Media Exchange Kits available for five years from date of last HP shipment, as indicated for each product in the "Discontinued Software" table in this section.
- Availability of telephone assistance through Hewlett-Packard Help Line Response Centers.
- Continuing coverage in this magazine—the *HP PC Communicator.* (By the way, you can help—share your tips and ideas with other users—just send a note to the *HP PC Communicator* editor.)

Products Not Listed

Because entertainment software packages are low-priced, there are no exchange kits for these products. Re-order the original product to replace damaged discs.

For information on other products not listed, contact your dealer or HP sales and service office.

Touchscreen/150
Software Exchange Kits

Product	Version	Order Part Number†	Notes
Touchscreen (HP 150B) Operating System and Utilities		45626-63007	1
Sys Master Disc			
MS-DOS	2.11		
MS-DOS COMMANDS	2.11		
P.A.M.	B.02.02		
HPBIOS	B.02.02		
FORMAT	B.02.00		
DEV CONFIG	B.02.00		
Appl Master Disc			
COPY/BACKUP	B.02.02		
INSTALL	B.02.02		
SET UP P.A.M.	B.02.02		
MS-DOS UTILITIES	B.02.03		
Touchscreen II Operating System and Utilities	2.11	45847-63004	2
MS-DOS	2.11		
MS-DOS COMMANDS	2.11		
P.A.M.	C.01.00		
HPBIOS	C.01.02		
FORMAT	C.01.00		
DEV CONFIG	C.01.00		
EASY CONFIG	C.01.00		
COPY/BACKUP	C.01.00		
INSTALL	C.01.00		
SET UP	C.01.00		
SAVERAM	C.01.01		
MS-DOS UTILITIES	C.01.00		
OP SYS MASTER:			
European Spanish		45847-63005	
French		45847-63006	
German		45847-63007	
Dutch		45847-63008	
Norwegian		45847-63010	
Swedish		45847-63011	
UK		45847-63012	
Finnish		45847-63013	
Danish		45847-63014	
Italian		45847-63015	

Product	Version	Order Part Number†	Notes
Touchscreen Operating System (upgrade)	3.2	45849-63031	
Touchscreen II Operating System and Utilities		45847-63017	
MS-DOS	3.2		
MS-DOS COMMANDS	3.2		
P.A.M.	E.01.01		
HPBIOS	E.01.01		
FORMAT	E.01.01		
DEV CONFIG	E.01.01		
COPY/BACKUP	E.01.01		
INSTALL	E.01.01		
SET UP	E.01.01		
SAVERAM	E.01.01		
STORE CONFIG	E.01.01		
MS-DOS UTILITIES	E.01.01		
System Master Exchange Kit		45847-63030	
MS-DOS	3.2		
MS-DOS COMMANDS	3.2		
P.A.M.	E.01.01		
HPBIOS	E.01.01		
FORMAT	E.01.01		
DEV CONFIG	E.01.01		
EASY CONFIG	E.01.01		
Application Master Exchange Kit		45847-63031	
COPY/BACKUP	E.01.01		
INSTALL	E.01.01		
SET UP	E.01.01		
SAVERAM	E.01.01		
STORE CONFIG	E.01.01		
Utility Master Exchange Kit			
MS-DOS UTILITIES	E.01.01	45847-63032	

Product	Version	Order Part Number†	Notes
AdvanceLink (upgrade)	A.04.04	45431-63002	
AdvanceLink (update)	A.04.04	45431-63001	
Application Master (150 B)	B.02.00	45626-63006	
BASIC Interpreter	*A.01.01	45445-63002	
BASIC Compiler	A.01.00	45446-63002	
Charting Gallery	A.01.00	45513-63001	
Charting Gallery Upgrade	B.03.00	45513-60001	
COBOL	A.01.00	45448-63001	
Compiled BASIC	A.01.00	45446-63002	
Drawing Gallery	A.02.01	45411-63002	
Drawing Gallery Upgrade	B.03.00	45411-60001	
DSN/Link	A.01.01	45425-63001	
ExecuDesk	A.01.01	45444-63001	
Executive Card Manager (Upg/rp)	A.02.00	45421-63004	
Executive MemoMaker (replacement)			
Gold, Utility and Fonts master	C.03.00	45418-63005	
Set-up and Dictionary master	C.03.00	45418-63007	
Executive MemoMaker (C.02.00 to C.03.00 upgrade)	C.03.00	45418-63006	
Forms Master	A.01.00	45443-63001	
FORTRAN	A.01.00	45449-63001	
FORTRAN Upgrade	*A.01.00	45449-63003	
Gallery Collection Upgrade	B.03.00	45437-60001	
Gallery Collection			
Bar, Line & Pie Charts	B.03.00	45513-63001	
Basic Portfolio Discs 1 & 2	B.03.00	45411-63004	
Basic Portfolio Discs 3 & 4	B.03.00	45411-63005	
Business Management Portfolio Discs 1–3	B.03.00	45570-63001	
Gold Master	B.03.00	5061-9914	
Set-up & Utility	B.03.00	5061-9917	
GW BASIC	*A.01.04	45450-63002	
HP Message to AdvanceMail (upgrade)	A.00.02	27534-63007	
HP-IB Command Library (upgrade)	B.01.00	14857-63002	
HP-IB Command Library for MS-DOS	B.01.00	14857-63001	
HP Message	A.00.02	36568-63001	
HP Message to AdvanceMail	A.01.02	27534-63007	
HP Terminal Program	A.00.01	24597-65002	
HP Word	A.00.00	27505-63001	
HP Word/PC (upgrade)	A.03.00	27505-60016	

Product	Version	Order Part Number†	Notes
Lotus 1-2-3:			
System Disc	2.01	45566-63001	
Help Disc, Install, and Print Graph	2.01	45566-63002	
Translate/View	2.01	45566-63003	
MemoMaker Time Manager	A.02.00	45504-64002	
MS Word	B.01.00	45474-63002	
Pascal	*A.01.00	45447-63002	
PC Interface with HP 150	A.01.00	61060-63001	
PCF to Executive Card Manager (upgrade)	A.02.01	45421-63005	
Print Central	A.01.01	36890-63001	
Print Central Upgrade	A.03.00	32593-63001	
R:Base 5000	1.1	45563-63001	
R:Base 4000 to 5000	1.1	45563-63002	
Symphony	1.1		
Prog. Disc, Tutorial, Help		45498-63002	
Printgraph, Utility Discs		45498-63003	
Install Prog., Library Discs		45498-63004	
Tutorial1, Tutorial2 Discs		45498-63005	
VT100 Terminal Emulator	A.02.00	45412-63001	
VT100 Terminal Emulator	A.01.00	45412-63001	
Windows Kernal	A.01.03	45875-63001	
Windows Write/Paint	A.01.03	45875-63002	
X.21 Interface	26.22	18154-17101	

(See Notes on next page)

*Revised since original release

†For each kit ordered, along with your payment submit one corresponding original master disc. This is the disc with the HP software product number and description printed on the label. Be sure to make working copies before sending your master disc.

To determine the price for a kit, contact your dealer or HP office, or call the HP telephone order number for your country. (See the "How to Order" section later in this Current Information Insert.) Orders submitted without the correct master disc cannot be accepted. If you want a kit with 5.25" discs, please indicate this preference on your order. Otherwise 3.5" disc will be shipped, regardless of the size of your returned master disc.

Notes

1—Three double-sided discs, written in single-sided format, to exchange for damaged HP 150A or Touchscreen (HP 150B) media. To upgrade an HP 150A to the **Touchscreen (HP 150B)** operating system, order this kit. To update an HP 150A or Touchscreen to the **Touchscreen II** operating system, order the Touchscreen II Upgrade Kit (45849-63024) from your dealer or HP office. The upgrade kit includes the new operating system disc and the ROM integrated circuits required by the new disc; it is not user-installable. (Refer to the article "Upgrading Your HP 150A or Touchscreen to a Touchscreen II" in *Communicator* Issue #13 for details).

2—Double-sided exchange disc for damaged Touchscreen II media. To upgrade an HP 150A or Touchscreen (HP 150B) to the Touchscreen II operating system, order the Touchscreen II Upgrade Kit (45849-63024) from your dealer or HP office. The upgrade kit includes the new operating system disc and the ROM integrated circuits required by the new disc; it is not user-installable. (Refer to the article "Upgrading Your HP 150A or Touchscreen to a Touchscreen II" in *Communicator* Issue #13 for details.)

Vectra PC
Software Exchange Kits

Product	Version	Order Part Number†	Notes
AdvanceMail Upgrade (5.25″)	A.02.00	27535-60002	
AdvanceWrite I to AdvanceWrite Plus (Upgrade)	F.02.00	27546-60001	
AdvanceWrite II to AdvanceWrite Plus (Upgrade)	F.02.00	27546-60002	
AdvanceWrite III to AdvanceWrite Plus (Upgrade)	F.02.00	27546-60003	
AdvLink Replacement (5.25″)	B.02.00	68333-65017	
AdvanceLink Replacement (3.5″)	B.02.00	68333-63004	
AdvLink (Upgrade) (5.25″)	B.02.00	68333-65016	
AdvanceLink (Upgrade) (3.5″)	B.02.00	68333-63003	
BASIC Interpreter	2538	45952A	1
BASIC Interpreter (Upgrade/Replacement)	3.22	45952-63001	
CAT Upgrade			
5.25″	A.01.00	14573-61001	
3.5″	A.01.00	14753-61003	
CAT Replacement			
5.25″	A.01.00	14753-61002	
3.5″	A.01.00	14753-61004	
Charting Gallery Upgrade	B.03.00	68350-60002	
Drawing Gallery Upgrade	B.03.00	68351-60002	
Executive Card Manager	A.01.03	68331-65001	
Executive Card Manager Upgrade (5.25″)	A.01.08	68331-65002	
Executive MemoMaker	A.01.02	68330-65001	
Executive MemoMaker Upgrade	A.03.00	68330-60005	
Executive MemoMaker			
Application & Utility (5.25″)	A.03.00	68330-65002	
Gold & Dictionary (5.25″)	A.03.00	68330-65003	
Gallery Collection Upgrade	B.03.00	68352-60001	
Gallery Collection			
Application Master (5.25″)	B.03.00	68351-65002	
Application Master (3.5″)	B.03.00	68351-63001	
Bar, Line & Pie Charts (5.25″)	B.03.00	68350-65001	
Bar, Line & Pie Charts (3.5″)	B.03.00	68350-63001	
Basic Portfolio Discs 1, 2 & 3 (5.25″)	B.03.00	68351-65001	
Basic Portfolio Discs 1 & 2 (3.5″)	B.03.00	68351-63002	
Basic Portfolio Disc 3 (3.5″)	B.03.00	68351-63003	

Product	Version	Order Part Number†	Notes
Business Management Portfolio Disc 1 (5.25″)	B.03.00	68326-65001	
Business Management Portfolio Disc 2 (5.25″)	B.03.00	68326-65002	
Business Management Portfolio Disc 3 (5.25″)	B.03.00	68326-65003	
Business Management Portfolio Discs I & II (3.5″)	B.03.00	68326-63001	
Business Management Portfolio Disc III (3.5″)	B.03.00	68326-63002	
Gold & Utility Master (5.25″)	B.03.00	5061-9915	
Gold Master (3.5″)	B.03.00	5061-9919	
Set-up Master (5.25″)	B.03.00	5061-9916	
Graphics Gallery Update	A.01.00	68352-65002	
HP-IB Command Library (Upgrade)		82990-65001	
HP Message	A.00.02	36569-65001	
HP Message to AdvanceMail (Upgrade)	A.01.02	27535-65009	
HP Terminal Program	A.00.01	24597-65001	
HP Terminal Program (3.5″)	A.00.01	24597-65002	
HP Word/PC (Upgrade) (5.25″)	A.03.00	27536-60008	
MS-DOS Op Sys Disc	A.01.02	45951-60001	
MS-DOS Op Sys Disc	A.01.04	45951-63001	
MS-DOS Op Sys Disc	B.01.01	45951-63017	
MS Macro Assembler	4.0	45953-60001	
MS Windows Applications & Write Discs (5.25″)	B.02.00	45954-60004	
MS Windows (Upgrade, 5.25″)	B.02.00	45954-60001	
MS Windows/286 2.1 (upgrade) (5.25″)	B.02.10	D1318-65002	
MS Windows/286 2.1 (upgrade) (3.5″)	B.02.10	D1318-63001	
MS Windows Kernel (5.25″) Set-up, Build & Display Discs	B.02.00	45954-60002	
MS Windows Kernel (3.5″) Set-up, Build & Display Discs	B.02.00	45954-60005	
MS Windows Fonts & Utilities (5.25″)	B.02.00	45954-60003	
MS Windows Fonts & Utilities (3.5″)	B.02.00	45954-60006	
Multiple Character Set Utilities MCS	A.01.01	5061-8970	
Office Talk	A.01.02	24520-15001	
PageMaker	3.0		2

Product	Version	Order Part Number†	Notes
PC Instrument Data Acquisition	A.02.00	14856-65001	
PC Instrument System	B.01.00	61061-65001	
PC Instrument System	B.01.00	61061-65002	
Print Central	A.01.00	36890-65001	
Print Central (Update)	A.03.00	32593-63001	
R:Base 5000	2537	68336-65001	
R:Base Program Interface		68337-65001	
R:Base System V	1.1	68328-65012	
Scanning Gallery	A.02.00	68357-65001	
Scanning Gallery MS Windows Run-Time Version	A.01.00 & A.02.00	88290-10150	
Set-up/Utilities Disc Vectra CS (3.5")	B.03.00	D1102-60041	
Set-up/Utilities Disc Vectra CS (5.25")	B.03.00	D1102-60040	
Set-up/Utilities Disc Vectra ES (3.5")	B.03.00	D1351-60053	
Set-up/Utilities Disc Vectra ES (5.25")	B.03.00	D1351-60054	
Symphony	2538	68339-65001	
VT 100 Terminal Emulator	A.02.00	45412-63001	
1-2-3 by Lotus	2.01	68340-65001	

Notes

1—Because an exchange kit would be priced at approximately the same price as the original product, the order number is for the original product.
2—Aldus Corporation, 411 First Ave. South, Suite 200, Seattle, WA 98104 U.S.; (206) 622-5500.

Portable
Software Exchange Kits

Product	Version	Order Part Number†	Notes
BASIC Interpreter	A.01.01	45445-63002	
BASIC Compiler	A.01.01	45446-63002	
Lotus 1-2-3 Upgrade (ROM)	2.01	45539-64001	
Prog. Tools	A.01.00	45419-63001	

Discontinued Software
Replacement Media Exchange Kits

Product (Notes)	Version	Order Part Number† 3.5″ Disc	Exchange Available Through
Touchscreen/150:			
3278 Emulation	A.01.00	45641-63001	September, 1989
BPI Gen. Acctg.	A.01.00	45455-63001	June, 1990
BPI Personal Acctg.	A.01:11	45459-63001	June, 1990
BPI Accts. Rec.	A.01.11	45456-63001	June, 1990
Condor 1/150	A.02.11	45415-63002	April, 1990
Condor 3	A.02.11	45416-63002	January, 1992
Condor 3*	A.02.11	45415-63002	April, 1992
Context MBA/150	A.02.03	45481-63001	April, 1990
CorrectStar	3.32	45427-63002	September, 1992
CorrectStar hard-disc upgrade	3.32	45429-63002	September, 1992
CorrectStar to SpellStar	3.32	45429-63001	September, 1992
Diagraph	A.03.01	45463-63001	September, 1992
EtherMail	2.1	45639-63001	October, 1991
EtherShare	2.1	45645-63002	October, 1991
EtherShare/150 Server	1.0	45649-63002	October 1991
EtherLink	2.1	45844-63002	October, 1991
Gallery Picture Library Vol. II	A.01.00	45433-63001	September, 1992
Graphics (bar disc, text disc, pie disc, line disc, examples disc)	A.03.01	45410-63001	April, 1990
GraphPlan	1.00.T2	45467-63001	
GraphWriter	A.01.01	45484-63001	May, 1991
Lattice C Compiler	A.01.01	45452-63001	June, 1992
Lotus 1-2-3	1A		January, 1992
System Disc		45482-63001	
System Disc & Backup disc		45482-63004	
Utility		45482-63002	
Tutorial 1&2		45482-63003	
Printgraph		45482-63005	
MailMerge	A.03.30	45401-63001	March, 1990
MemoMaker	B.01.02	45420-63001	December, 1991

Discontinued Software
Replacement Media Exchange Kits

Product (Notes)	Version	Order Part Number† 3.5″ Disc	Exchange Available Through
MicroPlan	4.04.T2	45465-63001	May, 1991
MicroPlan Consol.	4.04.T2	45466-63001	May, 1991
MS Spell	A.01.00	45556-63001	September, 1992
MultiMate	3.29	45424-63001	September, 1992
MultiPlan	A.01.10	45473-63002	May, 1991
Painter	A.01.00	45540-63001	September, 1992
PCF	B.01.02	45422-63001	December, 1990
PFS: File & Report	A.02.41	45488-63001	May, 1991
Picture Perfect	A.03.01	45462-63001	September, 1992
R:Base 4000	1.1	45545-63001	December, 1991
SpellStar	A.03.30	45402-63001	March, 1990
Transend COMplete	A.01.00	45414-63001	May, 1991
VisiCalc	B.01.02	45405-63004	April, 1990
WordStar (HP 150)	3.34	45400-65031	September, 1992
WordStar (150/110)	3.34	45400-63030	September, 1992
HP Vectra:			
CAT (5.25″)	A.01.00	14753-61002	September, 1993
CAT (3.5″)	A.01.00	14753-61004	September, 1993
Exec. Spreadsheet	A.01.01	68332-65001	September, 1992
TextChart	A.02.00	45406-65001	August, 1990
Portable/110:			
DataFax	A.01.01	45408-63001	December, 1990
dBaseII	*A.02.41	45468-63001	September, 1992
PC 2622 (Reflection)	1.0	82861-64001	March, 1991
Rags to Riches			
Ledger	A.01.00	45520-17301	December, 1992
Sales	A.01.00	45521-17301	December, 1992
Receivables	A.01.00	45522-17301	December, 1992
Payables	A.01.00	45523-17301	December, 1992
Reflection	1.0	82861-64002	March, 1991
WordStar (HP 110)	3.34	45400-63030	September, 1992

*Revised since original release.

Discontinued Software
Replacement Media Exchange Kits

Product (Notes)	Version	Order Part Number† 3.5" Disc	5.25" Disc	8" Disc
HP 12x: Exchange Available Through April, 1990				
Op Sys/Util/12x	*A.02.00	45900-13810	45900-15810	
VisiCalc/12x	*A.02.01	45531-13800	45531-15800	45531-18800
Graphics/12x	*A.01.03	45532-13800	45532-15800	
Word/12x	*A.02.03	45533-13800	45533-15800	45533-18800
Link/12x (3)	A.02.00	45534-13800	45534-15800	
DSN/Link/12x	A.01.01	45534-13810	45534-15810	45534-18810
BASIC/12x	A.05.21	45535-13800	45535-15800	45535-18800
Programming/12x	A.01.00	45536-13800	45536-15800	45536-18800
Condor 1/12x (5)	A.02.00	45550-13800	45550-15800	45550-18800
Condor 3/12x (4)	*A.02.00	45550-13802	45550-15802	45550-18802
BPI G/A/12x	A.01.00	45552-13800	45552-15800	45552-18800
BPI Payroll/12x	A.01.00	45553-13800	45553-15800	
WordStar/12x	A.01.00	45560-13800	45560-15800	45560-18800
SpellStar/12x	A.01.00	45561-13800	45561-15800	45561-18800
MailMerge/12x	A.01.00	45562-13800	45562-15800	45562-18800
MicroPlan/12x	A.01.00	45670-13800	45670-15800	
MicroPlan Cons./12x	A.01.00	45671-13800	45671-15800	
WordStar	3.31	n/a	68345-65001	May, 1992
WordStar Professional	3.31	n/a	68346-65001	May, 1992

See notes on next page.

*Revised since original release.

†For each kit ordered, along with your payment submit one corresponding original master disc. This is the disc with the HP software product number and description printed on the label. Be sure to make working copies before sending your master disc.

To determine the price for a kit, contact your dealer or HP office—or call the HP telephone order number for your country. (See the "How to Order" section later in this Current Information Insert.) Orders submitted without the correct master disc cannot be accepted.

Notes

3—This kit is to exchange your Link/125 disc for a Link/125 disc. (If you want to *upgrade* to Series 100 DSN/Link, order part number 45534-13810 or 45534-15810.)

4—A Condor 3 disc, a Condor 20-2 or 3 Upgrade disc, or a Condor 20-1 to 3 Upgrade disc may be exchanged for the Condor 3 disc.

5—A Condor 2 disc or a Condor 1 to 2 upgrade disc may be exchanged for the Condor 2 disc.

Mail Order Form
for HP Personal/Desktop Computer Software Update Kits

Use this form only for HP Personal/Desktop Computer Software Update Kits. Supplies matched to your HP Computer System can be ordered with update kits.

Ordering instructions:

1. Print or type all requested customer information.

2. Order software update kit(s) for your HP Personal/Desktop Computer. The original disc must be sent to HP with your order for the software update kit; see instruction 7.

3. You may also order computer supplies using this form. Obtain current prices by calling toll-free 800-538-8787. In California, Alaska and Hawaii call (408) 738-4133 collect.

4. Compute state/local taxes on the total cost of items ordered (HP is required to collect taxes; their omission delays your order). If tax exempt, you must provide your tax exemption/resale number.

5. Fill in any special shipping instructions, as required. HP pays freight to U.S. addresses on mail orders, EXCEPT you will be charged extra for special expedited shipping methods; and you will be charged freight on heavy, bulky items weighing more than 30 lbs., such as furniture or printer paper.

6. Fill in credit card information or enclose cashier's check for fastest shipment. Payment by personal or company check will delay shipment up to 10 days. Make check payable to **Hewlett-Packard Co.** All orders subject to credit approval. **Do not send currency, coin, stamps or purchase orders.**

7. Before your software update kit(s) can be shipped, you must send with your order one original disc (containing the software being updated) for each update kit ordered. This is the disc with the HP software product number and description printed on the label. Be sure to make a working copy before sending the original.

8. Mail this form, along with credit card information (or check), and the original disc to:

HEWLETT-PACKARD DIRECT MARKETING
Mail Order Dept., P.O. Box 60008, Sunnyvale, CA 94088

For carriers other than U.S. Mail, the address is:

HEWLETT-PACKARD DIRECT MARKETING
Mail Order Dept., 1320 Kifer Road, Sunnyvale, CA 94086

Thank you for your order!

Your Name	Phone ( ) –	Date

Disc Size: ____ 5.25" ____ 3.5"

Line	Product Number	Description	Quantity	Unit Price	Amount
1				.	.
2				.	.
3				.	.
4				.	.
5				.	.

Tax Exempt? ☐ No ☐ Yes

Tax Exempt or Resale Number

Subtotal	.
State/Local Taxes	.
TOTAL	.

Ship To

Company _____

Attn Of _____ Bldg/Room _____

Street Address _____

City _____ State _____ Zip _____

Standard Shipping Method is UPS Surface

Special Shipping Instructions

_____

_____

_____

Payment Method

☐ Purchase Order (Number _____)

☐ Check Enclosed (Payable to Hewlett-Packard Co.)

☐ Credit Card (Check one, provide all information, and sign)

☐ MasterCard ☐ [illegible] ☐ VISA

Account No. ☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐

Expiration Date ☐☐ – ☐☐

Name on Card _____

Address _____

Signature _____

Use this form for prepaid U.S. orders only

POD 1/84

(Over)

All of the items listed in this issue, except software update/upgrade kits and HP-conducted training courses, are available from your dealer or HP:

- Your local dealer can often provide immediate delivery. (To locate a dealer, call 800/FOR-HPPC in the U.S. or contact your local HP office—ask for "Personal Computer Dealer Sales.")
- Your HP sales and service office will transmit your order to the appropriate HP distribution center.

Ordering by Telephone from HP

Except for systems, peripherals (such as disc drives and printers), and training courses, most items listed in this issue are also generally available by telephone (HP Direct) from Hewlett-Packard:

- Australia ..... (03) 895-2645
  (03) 895-2615
  (03) 895-2815
  (03) 895-2861
- Austria ..... (0222) 2500-614
  (0222) 2500-615
  (0222) 2500-616
- Belgium/Luxembourg ..... (02) 761 31 11
- Canada..... (800) 387-3154
  Toronto local ..... (416) 671-8383
- Denmark 04 30 16 40
- Finland ..... (90) 887 2361
- France ..... (1) 69 86 17 25
- Greece ..... (01) 672 6090
- Hong Kong 584 8756
- Italy ..... (02) 9236 9702
- Mexico 676 7892
- Middle East
  Athens ..... (01) 6828811
- Netherlands 06-0501
- Norway ..... (02) 24 60 90
- Singapore 279 8824
- South Africa
  Johannesburg..... (011) 8025111
  Cape Town ..... (021) 537954
- Spain 91-6374013
  91-6370011

	■ Sweden ..... (08) 7502400 ■ Switzerland ..... (057) 31 24 90 ■ The Netherlands ..... (020) 547 6606 ■ United Kingdom ..... (0734) 697201 (0734) 441212 ■ United States ..... 800-538-8787 Alaska, California, and Hawaii ... 408-738-4133 ■ West Germany ..... (0130) 3322 For countries not listed, call your local HP sales and service office.
Ordering HP-Conducted Training Courses	Hewlett-Packard provides personal computer training courses at HP customer training centers using HP-provided equipment; they can also be taught by HP at your facility using your own systems. To order, call your HP sales and service office.
Ordering Software Update and Upgrade Kits	Your original master disc must accompany an order for software update or upgrade kits. Therefore, they are available only through your local dealer or from HP by mail. For ordering instructions, refer to the article "Software Exchange Kits" elsewhere in this Current Information section.
HP Internal Users	Have your purchasing department enter an I2 order on the supplying entity shown for the item on the Corporate Price List or the Parts Price List. If you are ordering a software exchange kit, return the original master disc to: Software Administrator/Internal Orders, Building 78/5 or to: Hewlett-Packard P.O. Box 60008 Sunnyvale, CA 94088 Attn: Software Administrator/ Internal Orders Reference your HP internal order number on the package.
HP Employees	Check with the Employee Computer Program Coordinator in your personnel or purchasing department for ordering instructions.

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Ordering *HP PC Communicator* Back Issues

The application information, operational tips, and programming techniques included in the *HP PC Communicator* make back issues valuable—to increase your productivity and improve your system knowledge.

All *HP PC Communicator* back issues are available. Some of the early issues may be supplied as photocopies.

To help you decide which issues you need, the table below shows when each product line was introduced. Not all issues have articles on all products.

All articles, including the Encyclopedia articles of past issues, are listed in the HP PC Communicator Master Index in the "yellow pages" of this issue.

To order back issues, check the HP Product Number in the table below, and call HP DIRECT. For the phone number nearest you, see "How to Order" in the green pages.

Issue Number	Order Number	
1	5955-3937	HP 120 and HP 125 introduced
2	5955-3943 U.S. 5955-3947 Intl.	
3	5957-6213	
4	5957-6204 U.S. 5957-6214 Intl.	
5	5957-6205 U.S. 5957-6215 Intl.	
6	5957-6206 U.S. 5957-6216 Intl.	
7	5957-6207 U.S. 5957-6217 Intl.	HP 150/Touchscreen introduced
8	5957-6218	
9	5957-6219	HP Portable introduced
10	5958-0250	
11	5958-0251	
12	5958-0252	
13	5958-0253	HP Vectra introduced
14	5958-0254	
15	5958-0255	
16	5958-0256	HP Portable PLUS introduced
17	5958-0257	
18	5958-0258	
19	5958-7673	
20	5958-7674	
21	5958-7675	
22	5958-7676	
23	5958-7677	HP Portable Vectra CS introduced
24	5958-7678	HP Vectra CS, ES, ES/12, RS/16, RS/20 introduced
25	5958-7679	
26	5958-7680	
27	5958-7681	
28	5958-7682	
29	5959-6765	
30	5959-6766	HP Vectra QS/16 introduced
31	5959-6767	HP Vectra LS/12 Laptop introduced

□

Ordering *HP PC Communicator* Subscriptions

The *HP PC Communicator* is the heart of the support program for the HP Portables, the HP 150 Touchscreen, the HP 12x, and the HP Vectra PC family.

This publication contains articles on how to best use your system, including programming techniques, information on software updates, notes on using applications, and corrections to manuals. The *HP PC Communicator* also lists known software problems and their solutions, and introduces new members of the HP PC family.

To order your *HP PC Communicator* subscription:

- Call (415) 372-6002 in the U.S.

or

- Complete the Subscription Order Form found on the next page, and mail it to the address given.

Please note that new prices are in effect February 1, 1989.

HP product numbers 45530A/B/C for *HP PC Communicator* subscriptions are no longer available through the HP sales offices. There are no new product numbers.

Note: We are unable to start your subscription with an issue which has already been mailed. To complete your set of Communicator issues, order individual copies as described in the article "Ordering HP PC Communicator *Back Issues" in this Current Information section.*

Address Corrections for *HP PC Communicator* Subscribers

Change the information on the mailing label by sending us the Change of Address form which appears at the end of the Current Information green pages. Allow six to eight weeks for the change to take effect.

HP Internal Users and HP Employees

Call (415) 372-6002 in the U.S., or complete the Subscription Order Form on the next page and mail it in. Then get reimbursed through petty cash. The Subscription Order Form can also be requested on HP Desk from Order Communicator/HP 4200/02.

Due to the cost of processing, please use HP purchase orders for multi-subscription orders only.

□

HP PC Communicator Subscription Order Form

Name _____ Phone _____

Company _____

Street Address _____

_____

City _____ State _____ Zip _____

Country _____

Please check one:

☐ U.S.	$44.00 U.S. funds
☐ Canada or Mexico	$52.00 U.S. funds
☐ All other countries	$64.00 U.S. funds (shipped airmail)

Bill to:

Name _____

Company _____

Street Address _____

_____

City _____ State _____ Zip _____

Country _____

Payment Method:

☐ Bill me
☐ Check enclosed (Payable **in U.S. funds** to Hewlett-Packard Co.)
☐ Credit Card (Check one, provide **all** information, and sign)
☐ MASTER CARD ☐ VISA

Account No. ☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐

Expiration Date ☐☐ - ☐☐

Name on Card _____

Address _____

_____

Signature _____

Mail this form to: HP PC Communicator
P.O. Box 2678
Martinez, CA 94553 USA

Phone: (415) 372-6002 U.S.

I31C

Change of Address Form for *Communicator* Subscribers

If the information on your *Communicator* mailing labels is no longer correct, please let us know. Attach your mailing label to the "Old Address" part of this form, fill in the "New Address," and mail it to **HP PC Communicator, P.O. Box 2678, Martinez, CA 94553 USA.** Allow 6–8 weeks for change to take effect.

Note: Since the *Communicator* is mailed from various divisions at HP, it is very important that you attach your old mailing label.

(please print)

Old Address:
(attach mailing label)

Name _____ Phone _____

Company _____

Street Address _____

_____

City _____ State _____ Zip _____

Country _____

New Address:
(exactly as it should appear on the mailing label)

Name _____ Phone _____

Company _____

Street Address _____

_____

City _____ State _____ Zip _____

Country _____

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HP PC Communicator
P.O. Box 2678
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